CORPORATION FINANCE

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Preface

Corporation Finance is divided into three parts. Part I, forms of business organization, opens with the simple illustration of a young boy engaged in business. Complications soon develop and even this little enterprise faces fundamental questions of organization and financial policy. The first three chapters, referring to many matters which are discussed later, can be covered rapidly.

Part II takes up important financial problems from the point of view of the corporation. Emphasis is placed upon the different types of securities and the rights and liabilities of the holders. In the belief that the proportion between the long-term funds contributed by the owners and those contributed by the creditors represents the heart of the problem of corporation finance, I have included here the influences and circumstances affecting the capital structure. This emphasis leads to a discussion of such subjects as reorganization and recapitalization much earlier than in most treatments of corporation finance. Part II ends with the subjects of external and internal financing and the combination movement.

Part III presents a shift in emphasis. Corporation financial policy has an impact upon the investor, the securities trader, the consumer, the worker, the regulatory agency, the tax collector, and the general public. Particular emphasis is placed upon the protection of the purchaser and owner of corporation bonds and stocks and upon the investment policies and influences of banks, insurance companies, and investment trusts. No attempt is made to suggest any method of analyzing the value or investment qualities of a security. The last four chapters contain a discussion of the place of the corporation in our economic structure and an analysis of its effect upon our social thinking. The problems of control are given special attention. Part III closes with a discussion of the circumstances under which a corporation may be left without benefit of charter. Problems will be found at the end of chapters, while a three-part list of references

and fifteen appendixes with detailed studies of specific problems complete the book.

This volume, aimed as a text for the three- or four-hour course in corporation finance, is not intended for students planning to become experts in finance. Its chief purpose is to enable students who have had only the beginning course in economics to acquire a broad foundation in corporation finance. Many of us will become interested in the corporation as investors in its stocks and bonds. Many of us work for corporations. All of us consume the products and services of corporations. All of us are interested in the corporation as it affects our social system and our everyday life. Some, it is true; may want to become financial managers or investment experts or accountants. To any of these groups this book is intended only as a beginning treatise and as a springboard for further study and investigation.

The teaching of this subject for many years has developed an appreciation of what the beginner knows and what he does not know. If certain phases deserve to be repeated, they have been repeated. The author makes no apology, for instance, for the frequent reference to the nature of surplus. Perhaps no single subject causes so much difficulty to the student of finance and accounting, and occasions so much confusion in our economic thinking as the concept of surplus.

This book occupies a middle ground between the practical or vocational approach and the highly theoretical treatment. It avoids minute details about specific corporations and contains few statistical data. Many subjects ordinarily discussed in a textbook of this kind are either omitted or given slight attention. Rather than attempt a thorough analysis of reorganization, I have summarized some of the essential principles in a manner to give the beginning reader a clear understanding of the purpose and scope of the usual plan of reorganization. Such subjects as reserves and working capital are considered only in connection with broader topics. On the other hand, this book places considerable emphasis on the mathematics of a bond investment and the financial policy of institutional investors on the ground that, though these subjects are omitted in many treatises, they have much to do with the corporation's cost of financing. The reader can fill in practical and statistical data from the source and reference material as given in the bibliography. Many of the problems and all of the appendixes contain illustrations of the subjects taken up in the text.

At the end of the volume will be found three sets of references. The first points to treatises that can or should be read concurrently

with the text as needed or desired. The next is a list of current materials, magazines, and government documents that may be followed by anyone interested in finding or working on further actual illustrations. Finally, there is a short selected list of books and reports intended for those who wish to go more deeply into various subjects.

I am indebted to many persons. Frequent illustrations and points of view have been suggested by students in the classroom. Mr. H. David Maloney, one of these students and now a graduate assistant at Indiana University, has criticized in detail the entire text and the problems and has helped to prepare the index. *Moody's Manual* and *Standard Corporation Records* have been freely consulted. Various public agencies, whose reports are mentioned in the bibliography for special study, have answered numerous questions. Many corporations have made available their annual stockholders' reports and other information.

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Part I

Forms of Business Organization

Chapter 1

The Beginnings of a Business

WE are always wanting something. We want things in a form different from that in which we find them; we want them moved from one place to another; we want them available tomorrow instead of today, today instead of tomorrow; we want to be some place where we are not, to talk to someone to whom we are not talking, to possess objects we do not now own, to do things we are not doing. The function of business is to satisfy such wants—at a profit.

To carry on business, men must organize. Business organizations take various forms which differ in their degrees of complexity, in their relations to government, and in the rights and liabilities of the participating parties. To carry on a business, records are necessary. They may be on "the thumb nail" of the proprietor, jotted down on the back of an envelope, or preserved in the books and ledgers demanded by an elaborate bookkeeping system, but some knowledge of expenses and income, of assets and liabilities, is needed. Consequently there have developed through the centuries two basic financial statements—the profit and loss statement and the balance sheet.

Elements of accounting statements. Bill Anthony, a boy in your neighborhood, saves $5 during an active summer of mowing lawns and running errands. He decides to sell candy and peanuts at the college football games. Bill will keep but few records, probably jotted down in a small notebook. Whatever form these records take, his balance sheet will appear essentially as follows:

Assets		Liabilities	
Cash	$5	Proprietary, or capital, Bill	$5

Bill borrows $5 cash from his father, and the balance sheet now reads:

Assets		Liabilities	
Cash	$10	Due to Father	$5
		Proprietary, or capital, Bill	5

It is plain to see that we have two classes of accounts on the balance sheet: assets and liabilities. The people in the United States place assets on the left side and liabilities on the right side. The English place assets on the right side and liabilities on the left. They say we are wrong; we say they are wrong. The argument—hair-splitting and utterly futile—has died down.

But, you may ask, does not the boy own the $5 which he himself turned into the business? Why, then, is proprietary listed on the liability side? Why is it not an asset? The answer lies in the fact that, in an economic sense, the business is considered to be separate from the owner. The business owns the cash. This is an asset. The business, in turn, owes it in a sort of equitable way to the boy. This constitutes the equity of the proprietor or the owner's equity.*

The question may also be answered in another way: the items on the left side represent what the business owns; those on the right side designate the source from which these assets or funds came. In our illustration the business obtained the funds as follows: $5 from Bill himself—this being, therefore, a proprietary or equity or ownership item—and $5 from an outsider, a creditor—this being strictly a liability. These are, in general, the only two sources from which any company can receive its funds. Thus, it would be possible to make up the balance sheet as follows:

Bill—Peanuts and Candy

We own the following assets:		We got the funds from:	
Cash	$10	Our creditors (Father)	$5
		The proprietor, Bill, as his owner's contribution	5

Next, Bill, acting for his company, purchases peanuts and candy and other refreshments at wholesale or a special price to the amount

* The word "equity" is used in a variety of contexts. For the various common usages in this book, see Appendix A.

of $9. The left side of the balance sheet has now changed, but the right side remains the same.

We own the following assets:		We got the funds from:	
Cash	$1	Our creditors (Father)	$5
Inventory	9	The proprietor, Bill	5

Bill is now ready to do business.

The first day of business. During the first football game Bill—that is, his business—sells $16 worth (at his selling price) of goods. He takes in $15 cash and gives $1 worth of credit to four or five students on condition that they pay him the next day. He hires another boy to help along for the day and pays him 50¢. He also runs short of goods and buys $2 additional at wholesale. At the end of the day he counts up his inventory and finds he has goods on hand worth $1.55, valued at his purchase price. Although the boy proprietor is not likely to make up a formal profit and loss statement (often called an income statement) for the day's operations, he will certainly know the amount of his profit if he is at all alert. Such statement would read as follows:

BILL—PEANUTS AND CANDY, PROFIT AND LOSS STATEMENT FOR THE DAY, OCTOBER 1, 1927

Sales		$16.00
Inventory at the beginning of the day	$ 9.00	
Purchases during the day	2.00	
Total owned at beginning plus purchases	$11.00	
Less: Inventory at the end of the day	1.55	
Cost of goods sold		9.45
Gross profit		$ 6.55
Expenses: wages		.50
Net profit		$ 6.05

We are not attempting here to give all the accounting processes, but Bill will make sure that his balance sheet, whether it is up to

complete accounting standards or not, will include the following items:

Assets (we have)		Liabilities (we got them from)	
Cash.... .	$13.50	Our creditors (Father) . .	$ 5.00
Due from students..	1.00	The proprietor—as original investment......... .	5.00
Inventory..	1.55	The proprietor—as undistributed net profits......	6.05
	$16.05		$16.05

The close relation between the profit and loss statement and the balance sheet is apparent. The profit and loss report is a moving picture showing what happened during the period. The balance sheet is a snapshot showing how the business stands at the end of these activities. The profit is carried from the profit and loss statement to the balance sheet.

The $6.05 is given as a separate account, but it could have been transferred immediately into Bill's capital,* making a total permanent proprietary capital of $11.05. The boy may want to "draw" some money out of the business for his own use. If so, it would appear more logical to reduce the available earnings rather than the permanent capital by such amount. In theory, however, both the permanent capital and the net profits are the same type of account, the only difference being that the capital was originally or directly turned into the business by the boy, while the profits are contributed indirectly to the extent that they are not withdrawn for the proprietor's personal use. Neither the capital nor the profits is an asset. They do indicate, however, one of the chief sources from which such assets were received.

Disposal of income. Bill concludes that he has done a good day's work. To celebrate, he takes his girl to the movies that evening and afterward treats her to a soda, the total cost being $1. Technically, he may be said to "distribute" part of his earnings. But, you ask, since the profits are not assets but are merely a bookkeeping entry

* Another word with many usages is "capital." See Appendix A. One use of "capital" is to designate the amount of the proprietor's permanent contribution, and the word is so used in this chapter.

indicating a source of the assets, how is it possible to distribute the profits? How can one "spend" a bookkeeping entry?

The terms "accumulate profits," "distribute profits," "invest earnings," it must be pointed out, are specialized language. It is the *assets* that are accumulated or distributed or invested. In our illustration Bill spends $1 cash with no corresponding value coming into the business. The effect of such payment is to reduce the undistributed profits by $1. We have become accustomed to saying that he paid $1 out of his profits. He really pays $1 out of his assets, charging this amount to (reducing) his undistributed profits.

The next day Bill has an opportunity to purchase a basket in which to carry his goods. This costs $1. He also pays $3 for some candy bars for his next week's business. These processes could be called "investment of earnings." The acquiring of the basket constitutes an investment in plant and equipment, while the purchase of the candy bars is an investment in inventory. It will be noted that such investment changes the *form* of the assets, but it does not alter the total of the undistributed net profit or of the permanent capital.

Bill also pays his father $5 to cancel the debt and collects the $1 due from the students. The first transaction reduces the assets by $5 but it also reduces the liability side by $5. The business now has fewer assets than before, but all of them have come from the proprietor, either through the original capital contribution or through the "retention" of profits. The collection of the $1 from the students merely changes the make-up of the assets. Neither the settlement of the $5 debt nor the collection of the $1 in receivables affects the amount of the capital or of the undistributed profits.

The boy, by agreement, was to pay no interest to his father, but he gives a large candy bar each to his father, his mother and his two sisters "in appreciation." These bars cost 7¢ each wholesale, or a total of 28¢. This constitutes a "paying out" or "distribution" of earnings, since nothing of measurable value is received in return by the business. Of course, this strategic expenditure may make his sisters ambassadors of good will in the neighborhood, and it may later pave the way for another loan from his father. These incidental benefits are not direct enough to give them the characteristic of an asset. Often, however, companies which carry on large and unusual advertising or promotional campaigns "capitalize" * these expenses,

* "Capitalization" is another word which has several meanings. See Appendix A.

that is, they add their value to the assets, to be "written off" over a short period, such as three or five years.

As a result of these transactions the balance sheet for Bill's business now reads:

Assets		Liabilities	
Cash	$4.50	The proprietor—as original investment	$5.00
Inventory	4.27	The proprietor—as undistributed net profits	4.77
Equipment (basket)	1.00		
	$9.77		$9.77

Expansion. Business prospects are bright. The home team is winning. The customers have plenty of money. Friends and neighbors look with favor upon this rising young businessman. Bill decides to expand his business. In this expansion he has the choice of two general alternatives. First, he may borrow. His father is again willing to advance the money. Second, he may take in a partner. The proper decision will depend upon many considerations. If he borrows the money, he will be able to retain all the earnings himself after paying all expenses and the agreed rate of interest. On the other hand, if his business does not prove as successful as he hopes, the debt and interest might become a burden. He would have to do all the work himself or hire someone, which would involve an additional financial risk.

If he takes in another boy as a partner, he must share the profits with him equally or in some agreed proportion. On the other hand, he would not be commiting himself to any fixed interest payments. The partner would work with him as an equal in the management of the business and would not be paid a fixed salary. But the partner would be his general agent in the conduct of the business, and in the eyes of the law and of the public he would have the same rights as Bill in the making of decisions within the scope of the partnership. This general power of each partner to act as agent for the others in the course of the business might have some uncomfortable, or even disastrous, results, as we shall see later.

Bill has a friend, Joe, who has ability, common sense, and integrity. The two boys are congenial and have the same interests. And, very important, the friend has $10 in cash! They become partners,

Joe agreeing to contribute as his capital a sum in cash equal to the total capital and undistributed net profits of Bill, or $9.77. This sum is thus to become the initial proprietary contribution, or capital, of each partner. Both of them are to work together in the running of the business.* They agree to share profits equally. The balance sheet of the new business unit, after the carrying out of this agreement, reads as follows:

Assets		Liabilities	
Cash	$14.27	Capital—Bill	$ 9.77
Inventory	4.27	Capital—Joe	9.77
Equipment (basket)	1.00		
	$19.54		$19.54

A full-fledged business partnership. Twenty years elapse. The business has flourished. A third partner has been added. The firm of Anthony (the original Bill), Barr & Cooper, manufacturers of and dealers in candies and ice cream products, presents the statement of assets and liabilities shown on the following page.

Balance sheet–Asset accounts. By such a statement the company announces to the world that it owns various assets, to which it has assigned specific values, some of which are known to be correct, others are mere appraisals. Accounting is not an exact art, though it does deal in "symbols of certainty." The values of most of the assets are often arrived at by intelligent (though sometimes not even intelligent) guesses.

Of these assets, certain ones are fixed—that is, they are used over and over again, continuously for a long period, in the business. Their gross value is given as the cost, which might or might not be the cost if bought at the present time. Furthermore, they wear out and deteriorate, and some of them become outmoded owing to new inventions or changes in people's habits and wants. Therefore, in order to arrive at a net value for such assets, it is necessary year

* The Uniform Partnership Law, in effect in one half of our states, following in general the common-law principles, defines a partnership as "an association of two or more persons to carry on as co-owners a business for profit." All of these characteristics are necessary: (1) an association of two or more persons; (2) an intention to carry on as partners; (3) co-ownership; (4) a business for profit.

Assets

Fixed assets	
1. Land and buildings, less depreciation and obsolescence reserves	$ 50,000
2. Machinery and equipment, less depreciation and obsolescence reserves	70,000
3. Furniture and fixtures, less depreciation and obsolescence reserves	10,935
Investments	
4. Securities held for investment	5,300
5. Securities held for special funds	6,000
Intangible assets	
6. Patents, processes, and licenses	5,000
7. Good will	10,000
Current assets	
8. Cash on hand and in the bank	32,442
9. Readily saleable securities	1,340
10. Accounts and notes receivable, less allowance for bad debts and returns and discounts	5,280
11. Inventories of finished goods, partly finished goods, and raw materials	39,744
Deferred charges	
12. Prepaid insurance	750
13. Prepaid wages, salaries, and rents	4,546
Total assets	$241,337

Liabilities

The business received these assets from the following: (The customary terminology is given in the parentheses.)

14. The holder of a mortgage, who furnished us funds on a long-term basis. This is our long-term debt. (Mortgage outstanding)	$ 24,000
15. The bank, which loaned us on a short-time basis. (Notes payable)	2,500
16. The furnishers of products whom we have not yet paid, but will pay by the tenth of next month. (Accounts payable)	5,345
17. Our wage earners who are paid twice a month. Their unpaid or accrued wages are (Accrued wages)	599
18. The holder of the mortgage to whom we pay interest twice a year. The interest has, at the time of this statement, accrued to the amount of (Accrued interest)	250
19. The taxing units to whom we know we will have to pay taxes. We have estimated them to date and have set up a reserve of (Reserve for taxes)	5,400
(The total of items 15 to 19 inclusive constitutes our current liabilities.)	
20. The three proprietors who put in capital as follows:	
(Anthony—Capital)	60,000
(Barr—Capital)	44,000
(Cooper—Capital)	55,000
21. And, in addition, we have let part of our share of the earnings stay temporarily in the business.	
(Anthony—Drawing)	13,017
(Barr—Drawing)	5,341
(Cooper—Drawing)	10,885
22. In addition, the business has set up a reserve against certain adverse events which the partners hope will not happen (Reserve for contingencies)	15,000
Total liabilities	$241,337

after year to accumulate an allowance or reserve for depreciation and obsolescence, the amount of which is also based upon estimates.

The company has placed $11,300 into investments and securities held in special funds. These are probably appraised at cost.* This figure, however, does not necessarily represent their true market value at the present time. Though these investment or special funds may be fairly marketable, the proprietors presumably intend to hold them for some time. The investments represent an outlet for some extra cash while the special funds are to be used only for special purposes. These special funds are to be used to pay off a certain portion of the mortgage before the maturity date.

The organization owns patents and processes which the partners have developed with the aid of several inventive employees. It also holds exclusive rights and licenses to manufacture certain candy bars and soft drinks in the area. The company has assigned a more or less arbitrary value of $5000 to these patents, processes, and licenses. Relying upon its favorable standing with the public and in the trade, it has also placed a value upon its good will or capacity to earn beyond the usual or customary return in the candy manufacturing industry.

Though many companies exclude these "intangibles" from their balance sheets because of their vague value and uncertainty of continuance, or assign them a purely nominal figure such as $1.00, the proprietors of our partnership have assigned to them a total value of $15,000. Most accountants agree that good will can logically be given a value only when it has been paid for—by the purchase, for instance, of some prosperous, going concern favored with an above-the-average record of earnings.

The company has assets of a current nature. These may be in cash or they may be in the form of unrestricted investments which can be sold at any time. Or they may be accounts and notes receivable, which are readily discountable or collectable in a short time, say within a month. Or they may be in the form of goods, which are processed or sold or turned over fairly rapidly in the ordinary course of manufacturing or trade. The readily salable investments are probably valued at cost, while the inventories are usually appraised at cost or market, whichever is lower.

The accounts and notes receivable might not be collected in full; therefore, good accounting practice demands the setting up of an

* The method of figuring book value of premium and discount bonds is discussed in Chapter 19.

allowance for bad debts. Furthermore, the receivables may be reduced by return of goods and by discounts for early payment. Some companies set up a reserve for these possible reductions. The cash, even if it is in the form of a bank account, is generally given its full face value on the books.

Finally, a small portion of the assets are in the form of deferred charges, often called prepaid expense, such as insurance paid in advance but partly unused at the present time, and prepaid salaries and rent. The insurance is generally given a money value, calculated according to the proportion still remaining from the original amount purchased. For instance, if the company has paid a fire insurance premium of $1,000 covering protection for a three-year period, the prepaid insurance at the end of one year would have a value of $666.67. The prepaid rent is given similar treatment. Any prepaid salaries are listed at the figure unearned by the employee at the date of the statement.

Balance sheet–Liabilities accounts. The firm obtained its assets from two general sources, that is, from creditors and from the proprietors. The company received $24,000 directly from a lender on its promissory note, giving the holder or creditor as security a mortgage on its land and building. It also borrowed $2500 from the bank and received $5345 from businessmen in the form of goods bought on credit. The company has in effect received $599 from employees who have not yet been paid for the time they have worked since the last pay day; $250 from the holder of the mortgage in whose favor this amount of interest has accrued but is not yet due; $5400 from various governments in whose favor an estimated tax bill of that amount has accumulated to date.

The accruals just mentioned—wages, interest, taxes—do not represent direct advances of money by the individuals or by the governments. Let us refer to the accrued wages, for instance. It would be possible to pay wages every day or even every hour or minute. It is more practical, however, to let unpaid wages build up for a week or two or even a month with the definite understanding that payments will be made at specified, prearranged times. Between pay days the company gets the benefit of the worker's labor without having made any outlay for it. Though the employee has not lent or advanced money to the company, he has lent the company his labor which is valued on the books according to the contract price. Similarly, the holder of the mortgage has advanced the service of his funds prior to the receipt of the interest.

The taxing units could demand their taxes every day, if the law so provided, but by deferring collection they are letting the individual taxpayers have the possession and use of funds really belonging to the governments. The total net income and therefore the total income tax liability is not known until the end of the year. The rates of property taxation are fixed each year by dividing the amount of the total income wanted by each of the respective governments involved by the aggregate amount of assessed taxable property subject to its jurisdiction. It is necessary or advisable, therefore, for large payers of such direct taxes to estimate their tax liability and to set aside a reserve for taxes. The actual taxes eventually paid may vary from this anticipated figure. Internal-revenue, sales, and social-security taxes are collected by companies constantly, but the settlement for them is generally made on stipulated dates.

The total obtained from all these outside sources is $38,094. This sum represents liabilities which must be paid at the time due. They represent legally enforceable claims.

Balance sheet–Proprietary items. The remainder of the assets were received in some form from the three partners. Mr. Anthony contributed $60,000, Barr $44,000, and Cooper $55,000 as capital in much the same way as some twenty years ago young Bill turned in his first $5 to the partnership and added to it his undistributed earnings of $4.77. These represent a permanent contribution.

The drawing accounts, on the other hand, represent a highly temporary contribution by the partners to the business. Each partner's share of net profits is from time to time added (credited) to his personal, or drawing, account. The partners may then draw out such amounts, leave them there temporarily, or, by agreement with the other partners, add them to their respective permanent capital.* Anthony, for instance, has the right to draw out $13,017 as his remaining share of "undistributed profits," but he has not done so. In the meantime, funds to this amount are working for the company. By not taking them out he has really advanced them as additional temporary capital. The total of these drawing accounts is $29,243.

The "reserve for contingencies" is in a quite different position than the other reserves so far encountered in this balance sheet. Though, from time to time, we will refer to these reserves, the differences can be summarized at this point. The accountant refers to the reserve for depreciation and obsolescence and the allowance for

* This process is often called capitalization of profits. See Appendix A.

bad debts as a "valuation reserve" or an "offset reserve." They are so called because they are basically subtractions from the gross or cost value of the assets on the books and are needed to give these assets a proper "net valuation." * The reserve for taxes is a "liability reserve" and, as already mentioned, it is set up to take care of a liability which must be estimated or is steadily accruing but is not yet due.

The reserve for contingencies, in contrast, is a "proprietary reserve." It is a bookkeeping entry set up out of the owners' accounts to create a buffer against some event which the proprietors are afraid may happen but which they hope will not. Some years ago a bad flood of the White River had seriously weakened the foundation of one of the warehouses, and the company had to spend $10,000 in repairing the damage. Floods occur often, but they are not always of the same severity. Various precautions have also been taken to prevent or to minimize the damage. But the hazard is still there, so the partners set up this reserve. If, luckily, the contingency does not happen or if the reserve becomes too large, the excess portion may be turned back into the proprietary accounts whence it came—into capital or into the drawing accounts of the partners—in the proportion in which their agreement specifies that they are to share profits or losses. If, on the other hand, a serious loss does occur, such as damage to the amount of, say $10,000, without insurance, the charge may be made to the reserve for contingencies, leaving the capital and drawing accounts intact.

Someone may bring or threaten a lawsuit against the firm, perhaps on flimsy evidence. Here would be another use for a reserve for contingencies. If the plaintiff is likely to win, and the partners know that fact, it might be more appropriate to set up a liability reserve. If the books are inspected or are brought into court, however, such reserve could be played up by the plaintiff's lawyers as an admission of the firm's weak position. If the opponent wins the suit, the firm can pay the judgment with cash and eliminate or reduce

* Frequently these "valuation" or "offset" reserves are placed on the liability side. Assume, for instance, that the purchase price or construction cost of buildings was $60,000 and that the estimated depreciation and obsolescence of the buildings to date total $10,000. The net depreciated value on our balance sheet is $50,000. It would also be possible to insert the gross value of $60,000 under the land and buildings account and to include the "reserve for depreciation and obsolescence" of $10,000 under the liability side. To ascertain the balance sheet value of a depreciating asset it would then be necessary to consult both sides of the statement.

See Appendix A for different meanings and uses of the term "reserve."

(debit) the reserve accordingly. If the firm wins the suit, the partners can throw the amount of the reserve back into the partners proprietary accounts. The reserve has then become useless.*

[Problems for this chapter will be found together with those for Chapters 2 and 3 on pages 45-47.]

* For reasons which will develop as we go along, the proprietary reserves are much more frequently used by the corporation than by the partnership. Since corporations have proprietary accounts called capital stock and surplus, as against the capital and drawing accounts of the partnership, the proprietary reserves of the corporation are often called "surplus reserves." They are generally created out of surplus or out of income and if they become useless they are thrown back into surplus and thus become again available as a basis for distribution of dividends.

Chapter 2

Complications

FOR various personal reasons the firm of Anthony, Barr & Cooper is confronted with serious problems of organization. Mr. Anthony wishes to retire from active participation in the business but he would like to retain his connection with the company as a furnisher of capital. Barr and Cooper want to continue active in the management. The company needs additional funds for expansion, and two or three friends and neighbors are able, willing, and ready to "buy into" the business. What should be done?

Possible forms of business organization. Should Barr and Cooper continue in the partnership and take in these friends and neighbors as partners? Or would an entirely different organization, such as a limited partnership or a corporation, be more desirable? Just as differing situations may necessitate individual treatment in other phases of life, so the nature of the industry, the trend of the times, the attitude of government, the peculiarities of the human relationships, and the qualities and personal characteristics of the members may suggest or dictate different forms of organization in business.

In the general partnership, as developed in the common law, each partner has an equal share in the management and is both general agent for, and principal of, each of his associates in the conduct of the partnership business. The partners sometimes specify in their original agreement or articles of copartnership (or they later amend these articles by agreeing among themselves) that the functions of each partner are to be specialized. To refer to the partnership now in existence: Mr. Anthony might be designated to do the buying, Mr. Barr the selling, and Mr. Cooper the manufacturing. Or the three partners may agree that only in certain limited phases shall each act as agent for the others.

Such limitations or special instructions, however, do not apply to outsiders without notice. Not knowing about the agreement that Mr.

Barr is only to sell, Mr. Tinley, an outside party, approaches Mr. Barr and asks for a job in the manufacturing department, of which, by agreement among the partners, Mr. Cooper has charge. Mr. Barr violates his faith with his partners and agrees to give Tinley a position. Tinley can legally hold the partnership; that is, he can hold Anthony and Cooper as well as Barr on his contract. The firm of Anthony, Barr & Cooper, is a general partnership * and, in the absence of actual notice to the contrary to the third parties, each partner is both agent for, and principal of, the others in all the expressly designated and the normal and customary phases of the business.

Liability of members of a partnership. Each partner in a general partnership is burdened with an unlimited liability. Any one of the partners may make valid contracts with third parties on behalf of the other partners, which he should not have made according to the private understanding among them; worse still, through bad judgment or ignorance or bad faith, any partner, within the broad scope of the normal partnership business, may make unwise or improvident contracts with outside parties. Some commitments may be so bad as ultimately to force the partnership into financial difficulties or even bankruptcy.

Bad judgment is only one cause of business failure, but it is the most fundamental. Many of the other commonly listed internal causes, such as incompetence, inexperience, lack of capital, neglect, extravagance, speculation, and fraud, have their origin in unwise decisions either in the selection of agents or in actual operation. In addition to these direct circumstances, there are external causes of financial involvement, such as unfair competition, price changes, movements of the business cycle, and acts of government.

Regardless of whether the causes of the difficulty are external or internal, if the assets of the partnership are insufficient to pay the partnership debts, any creditor who has secured a judgment against the partnership may, as a general rule, execute it against the individual net assets of any one or more, or of all, the partners—that is, the liability is unlimited. The creditors may, for instance, levy upon the assets of only one partner if he has a large enough net estate and pay no attention to the others, in spite of the fact that the part-

* For definition of a partnership (often called general partnership in contrast to a limited partnership), see footnote on page 9 of Chapter 1. Also see page 563 of Chapter 30.

ners may have agreed among themselves to share all losses equally.*

If a partner is forced to stand all the loss in the first instance, he will in turn have the right to recover the proper amounts from the other partners according to the partnership agreement. This is called the right of "indemnity" or sometimes "contribution." But such agreement to share losses in a certain proportion is a matter involving only the internal relations among the partners and may usually be disregarded by creditors who have relied upon the legal status of the organization as a general partnership.

Liability in limited partnerships and in corporations. Difficulties arising out of the unlimited liability of general partners and out of the ineffectiveness of allocation of managerial duties and responsibilities tend to encourage the formation of some other form of business organization, such as the limited partnership and the corporation. In a limited partnership, at least one of the members must be a general partner while the others may be limited—that is, their liability is restricted to the investment they have actually made in the business. The limited partners can have no voice in the management or control, though they usually do have the right to inquire into the condition and progress of the partnership affairs.

Limited partnerships are unknown to the common law and can be organized only under the authority of the statutory law.† The

* In the literature on partnerships, you will find many references to "joint liability" and "joint and several liability." Suppose Tinley, a third party, had made a contract with the Anthony, Barr & Cooper partnership through, let us say, Anthony, as general agent for all. If the liability of *A, B,* and *C* is simply *joint,* there is really only one contract. If Tinley proceeds against one of them—Anthony—without bringing in the others, and obtains a judgment in a court of law, the contract is discharged and Barr and Cooper cannot then be held. If the contract is considered *joint* and *several,* there are in effect four distinct enforceable agreements—one with each of Anthony, Barr & Cooper severally and one with all of them jointly. In this event Tinley could sue the partners on the joint undertaking or he could sue each one separately. The Uniform Partnership Act provides that the partners' liability for torts and fraud is joint and several while on the ordinary contracts they are liable jointly; that is, a partnership creditor should sue all the partners jointly in the same action. But when a judgment is obtained, it may be executed in full against any one or more of the partners, who then have the right of contribution against the others. The laws and courts in a number of our states provide for "joint and several" liability even in the case of the ordinary partnership contracts. In equity, to prevent unfair distribution of available assets, the law and the courts have developed the process of "marshaling the assets," which amounts to joint and several liability. (See also footnote below.)

† The limited partnership was early recognized in the modern civil law of continental Europe. It was widely used in Louisiana, whose legal system was based on the civil law. New York was the first common-law state to intro-

firm name must not contain the surname of any of the limited partners. The certificate or agreement of partnership containing specified information must be recorded with the appropriate public officer in the jurisdiction in which the company does business, and sometimes the law requires that notice be published in a local newspaper so as to give all outsiders sufficient notice of the nature of the organization.

This brief description of the limited partnership suggests its disadvantages and the reason it is not a common form of business organization. The legal requirements and specifications for its formation or operation must be substantially and faithfully obeyed. Any material deviation from them may cause the organization to be considered a general or common law partnership and will subject the limited partners to the rule of unlimited liability. The limited partners must not act like proprietors or even frequent the place of business. If they do, third parties, relying upon such holding out or representation, may be permitted to consider them liable as general partners. Generally, a limited partnership is recognized as such only in the jurisdiction under whose statutes it was organized. States which do not have limited partnership statutes regard such organization as a general partnership.

Because it is the most effective, the customary method of insuring the limited liability of the members of a business firm and of providing an effective division of labor among its managers is the formation of a corporation. This organization operates through a board of directors elected by the stockholders—the owners of the capital stock—usually, but not always, from among their number.* The directors are not employees of the stockholders; they hold an independent legal status during their term of office. They, or the officers selected by them, appoint men to various positions, thus effectively assigning to each his particular responsibilities. The directors cannot delegate their functions or duties. By law they are in a fiduciary position or in a position of trust relative to both the corporation and the

duce the limited partnership by a statute, in 1822. Other states followed New York, but England did not recognize the limited partnership by statute until 1907. 47 *Corpus Juris* 1277-78 and 40 *American Jurisprudence,* Partnership, section 505, Lawyers Cooperative Publishing Company, 1942. Some form of limited partnership, particularly as provided in the Uniform law, has been sanctioned in a considerable number of our states.

* Unless the statute, charter, or bylaws provide for qualifications of directors, none are specifically required. If there is a requirement that a director be a stockholder, one share actually owned will be enough to qualify him. 19 *Corpus Juris Secundum,* par. 726. Shares so held are frequently called "directors' qualifying shares."

stockholders. In acting for the corporation they must always be open and aboveboard. They must obtain no secret profit or personal advantage by virtue of their position.

It is comparatively easy to organize a corporation to engage in such industrial activity as manufacturing, mining, or merchandising. Though a charter must be applied for from a sovereign state, the granting of such permission is almost a mere formality. The charter generally specifies the name of the corporation which must indicate that the company is incorporated; * its powers, which are usually stated in as broad or general language as possible; the amount of the authorized capitalization and the types and characteristics of the stock to be issued; the location of the home office; the duration or life of the company, which is frequently perpetual; the names and addresses of the original subscribers to the stock; the number and term of office of the directors and probably the names and addresses of those first holding this position.†

The requirements for organizing a banking, public utility, or railroad corporation are stringent and exacting. The appropriate state or federal authorities are charged by law with investigating carefully the need in the community for additional facilities of the kind contemplated. The authorities also look into the standing and financial responsibility of the incorporators and of the probable officers. Such special procedure is, of course, made necessary by the public character of the business in which the prospective company is to engage, rather than by the inherent nature of the corporation.

Is unlimited liability significant? Great emphasis has been placed on the difference between the limited liability of the stockholders of the corporation and the unlimited personal liability of general partners. Comparatively rarely, however, do partnership creditors seem to collect much from the personal estate of the partners. ‡ The indi-

* The requirements vary widely in different states and countries. Often the corporation name must begin with "The" and end with "Company." Other designations are "Inc." (Incorporated), "a corporation," "Ltd" (Limited liability or limited powers). A new corporation must select a name which is different from that held by corporations doing business in the state at the time of application.

† See Appendix B for extracts from the charter of Union Pacific Railroad Company. This company is the successor of The Union Pacific Railway Company, which held a charter from the United States government.

‡ A committee studying the question as to whether members of the Stock Exchange should incorporate reported that "in no case of bankruptcy of an Exchange firm had the creditors ever recovered anything substantial from the personal assets of a partner." The committee pointed out that if the partners were "men of integrity all assets have already been put at the disposal of the

vidual partners may also owe debts to their individual creditors. If partnership property and individual assets of the partners are in the hands of a court for distribution, the general rule is that partnership creditors have first recourse to partnership assets, while creditors of the partners as individuals have first chance at the individual assets. If there are no partnership assets available and if all the living partners are also insolvent, the partnership creditors may share with the individual creditors in the estate of the individuals. But the individuals are presumably also bankrupt. Therefore, they can lose nothing by the unlimited liability feature. The loss has already occurred.

If the firm is bankrupt and the assets are insufficient, the firm creditors can as a general rule share in the individual partners' assets after the individual creditors have been paid. If there is nothing left, nothing is lost by the unlimited liability rule. Many individuals have taken precautions against there being anything available. Within the required legal limits of time and intent, they may have assigned their property to their wives or other relatives. A wife has often been a great financial convenience.

Thus, if the partnership fails, the creditors' rights against the personal estate of the partners may lack substance. If a partner is honest and sincere, he has probably already turned in his available individual assets to save the partnership. If he is dishonest, he has probably evaded his obligations by transferring his property into "safe" hands. The unlimited liability feature may have neither hurt the partner nor helped the creditor. In law the partnership is, generally speaking, the same as and equal to the partners, but in actual business practice people dealing with a partnership regard it as a separate entity distinct from its members. In the final analysis outsiders rely on the property actually owned by the partnership and on its earning capacity, just as they do in the case of the corporation.

firm, and if they were not men of integrity, the assets would already have been hidden before bankruptcy was announced." Harold H. Bredell, "Re-examination of the Desirability of the Corporate Form of Business Organization" in *Indiana Law Journal*, Vol. 13, p. 551 (1938). There have, of course, been instances in which creditors of bankrupt partnerships have made substantial collections from the personal estates of the partners. To refer to a well-known illustration, Sir Walter Scott was a partner in a publishing firm which went bankrupt. Scott lost his fortune and then, though he could have protected his future income by means of bankruptcy, he spent the remainder of his life writing novel after novel in a heroic and in the end successful attempt to pay off debts of £120,000.

Continuity. The matter of continuity has been an important influence in the choice of form of organization. The sole proprietorship is, of course, legally the same as the proprietor, and the partnership is generally treated merely as equal to, or the same as, its members. The common law to a slight extent and some statutes such as the Uniform Partnership Law have endowed the partnership with a separate entity of its own for certain limited purposes, but the principle is nevertheless valid that the general partnership has no existence of its own. It is a relationship, not a separate being.*

Lawyers describe the partnership as a *delectus personae*—choice of person—relationship. No one can foist a partner upon anybody. In the Anthony, Barr & Cooper partnership each partner has personally selected the others as his partners or agents. If Mr. Cooper dies leaving his son, Mortimer, as his heir, Mortimer has no right automatically to succeed to the position of his father. By law the death of Mr. Cooper would automatically break up the partnership. Mortimer, as heir, may, of course, demand the share willed to him. Anthony and Barr will be forced either to buy him out with their own individual funds or to dispose of part of the assets of the business and turn the proceeds over to him. They could then continue as the new partnership of Anthony and Barr.

If they like and trust Mortimer, and if Mortimer is willing, Anthony and Barr can take him in as their partner, thus creating a new partnership. Sometimes, indeed, the difficulty of adjusting the matter in any other way may virtually compel them to accept Mortimer. But, at any rate, Cooper's death would automatically dis-

* Some courts permit a partnership to sue or to be sued in its own name. The Uniform Partnership Law permits a partnership to hold real estate. This section was purposely inserted in the Uniform Partnership Law because the courts under the common law had ruled that a partnership had no such capacity or power; the common law argument running as follows: real estate must be owned by a person (which includes a corporation), a partnership is not a person or a corporation, therefore, a partnership cannot hold real estate. Under the Uniform Partnership Law, the partners are considered tenants in partnership of specific business property which is, therefore, not subject to withdrawal by an individual partner without the consent of the others or to attachment or to dower on his behalf. The partnership, in short, owns the business property, each member having the right to insist that it be used in the carrying on of the normal work of the partnership. The provision in the Uniform Partnership Law and in the bankruptcy statutes that, in case of distribution of the partnership and individual assets by a court, the partnership creditors have first right to the partnership assets and the individual creditors first right to the individual partners' assets is essentially a recognition of the entity of the partnership. Lawyers often refer to this process in equity as the "marshaling of the assets."

solve the partnership, and even if Anthony and Barr take in Mortimer, a new partnership of Anthony, Barr & (Mortimer) Cooper has come into existence.

Some circumstances or forces will automatically break up a partnership. The most obvious of these, of course, is the death of a partner. The expiration of the term, the accomplishment of the object of the organization, the arbitrary and willful withdrawal of a partner in violation of the terms of the agreement, the expulsion of a partner for good cause, and, of course, mutual agreement among the partners will dissolve the partnership.

The bankruptcy of an individual partner or of the partnership causes a dissolution of the partnership. By the provisions of our law the estate of a bankrupt person, including the right to his share in the net assets of any partnership to which he belongs, passes into the jurisdiction of the court for the benefit of the creditors. This effectively cuts the business cords among the members. If partners are residents of different countries, the outbreak of war between these nations will dissolve the firm. War by its very nature makes illegal all private and commercial relationships among countries, including the *delectus personae* and principal and agent relation among partners. If the business of a partnership is made illegal by law—by prohibition legislation, for instance—such illegal status dissolves the partnership.*

Certain changes in the personal status of a partner may automatically dissolve a partnership. Under the common law, the marriage of a woman partner of a firm caused a dissolution of the firm because, under the common law, a married woman suffered a general disability to make contracts, though this was partly removed in equity. It can be said that when a man and a woman marry, they become one, but for legal purposes the husband becomes the *one*. If, for instance, Barr had been a single woman and married Mr. Davis, the continuation of the partnership would make Mr. Davis instead of Mrs. Davis a partner. Under the *deluctus personae* principle this would not be possible, unless Anthony and Cooper agreed to accept Mr. Davis, in which event a new partnership obviously would really result. If Barr married her partner Cooper, this marriage would also break up the partnership. The common law has generally been abro-

* A distinction should be drawn between *dissolution* of the partnership and the *termination* of the partnership business. It is clear that though the partnership as an organization is dissolved, the business may continue at least until final steps for its termination can be taken.

gated by statutes (called the Married Women's Acts) which give married women practically full property and contractual rights. Therefore, in states where such remedial laws have been passed, the marriage of a woman partner will probably not dissolve the partnership.*

In addition to the above circumstances and forces which automatically sever the personal partnership relation, there are certain others that will dissolve the firm only after proper decision by a court of equity. In general these include conditions which, if allowed to continue, would be unfair to the partners or prejudicial to the public interest. If a partner has been adjudged insane, or if he has become totally incapacitated to carry on the business, or if he is guilty of fraud or misconduct or is utterly incompatible, a court of equity may order the dissolution of the partnership. If the business is impracticable and has no chance of success, the court may arrive at a similar conclusion.

With respect to continuity, the partnership is even worse off than the sole proprietorship. The sole proprietorship may be broken up by the death of only one person—the individual proprietor—while the partnership may be terminated by the death of any one of two or more individuals. The probability of death in a partnership of eight or ten members is naturally greater than in an organization of two or three members. One reason which impelled the J. P. Morgan partnership to become a corporation was the frequency of death among the members, many of whom were elderly.

The corporation has the advantage of continuity. It may be chartered in perpetuity or for a limited number of years. Stockholders may come and stockholders may go, but the corporation goes on (probably) forever. Just as a river does not contain the same water from one day to the next and yet remains essentially the same old river, so the corporate being is unchanged by the coming and going of its members.

The death of a stockholder, accordingly, has no effect upon the life of the corporation. A stockholder dies, leaving a son. Title to his stock passes immediately to the executor or the administrator (depending upon whether or not he had made a will) and then, according to law, to the son, but these transfers have no direct effect upon the corporation's life. Bankruptcy, or lunacy, or incompatability, or any of the personal circumstances of the members which may break

* 26 *American Jurisprudence,* Husband and Wife, pars. 243-50.

up a partnership or serve as a valid cause for its judicial dissolution generally have no effect upon a corporation.

Segregation of assets. A weakness of the personal form of organization, such as the sole proprietorship and the partnership, lies in the fact that its assets are not set aside or segregated for its exclusive use. Harkness, an individual proprietor, owns a department store, a private bank, a ticket agency, and a saloon. He can shift assets from one business to the other almost at will. He can easily transfer funds from any of these businesses to his own personal use. If the department store proves financially unsuccessful, the creditors might attempt to fasten a lien on some of the assets of the bank, or of the ticket agency, or of the saloon, as well as on the rest of the Harkness personal estate. Regardless of its merits or ultimate success or failure, this threat could frighten the bank's depositors and could easily have an unfavorable effect on any of the business interests of the proprietor.

If the bank in our illustration is incorporated even with Harkness as the dominant stockholder, the bankruptcy of Harkness may give the creditors of the department store, or of the saloon, or of the ticket agency recourse only to his stock in the bank, not to the bank's assets. The assets of the bank remain segregated for its sole use. Situations such as these help account for the common requirement that commercial banking and some other businesses vested with a strong public interest must be carried on through an impersonal form of organization, such as the corporation, which permits an effective setting aside or segregation of its assets.

Such segregation of assets does not constitute an undiluted advantage. The knife cuts both ways. If the creditors of a stockholder cannot dip into the assets of the corporation, it follows that the creditors of the corporation as a general rule have no access to the outside resources of the fully paid-up stockholder.* This is, it will be

* There are exceptions to this rule. Bank stock was long subjected to double liability, the creditors of a failed bank having access to the personal estate of even the fully paid-up stockholder to the amount of 100 percent of the par value of his stock. This double liability has been abolished as to the shares of national banks issued after June 16, 1933, and has also been abandoned by many states. In some states if a corporation becomes bankrupt while owing wages the stockholders may be held liable to the workers. Occasionally, the stockholders may also be held for materials and supplies furnished to the corporation. The effectiveness of these special statutes seems to be rather limited. See Lewis Mayers, *Introduction to the Law of Business Corporations,* Longmans, Green & Co., 1939, Ch. XV.

noted, just another way of describing limited liability. Many argue that, other things being equal, a sole proprietorship or a partnership, because of the unlimited liability of the members, will have a credit standing superior to that of a corporation. The validity of this argument is dubious, in as much as we have seen that partnership creditors have rarely been able to collect much from the partners' personal assets. Even if this should be a theoretical disadvantage of the corporation, there are other compensating elements of strength.

It is pointed out, for instance, that a corporation can replenish or add to its capital more easily than a partnership. It may contact stockholders all over the world, in diverse positions in life and with varying sums of money at their disposal. The corporation has raised much capital from customers and from employees. It is true that the small one-man or closely held corporation, whose number is legion, has deliberately shut itself off from outside sources of funds and is rather limited in its financial scope. This limitation, however, is not inherent in the nature of the corporation, and many such corporations have opened their books to wider stock subscription.

"Esprit de corps" among members. The bringing together into the same corporation of numerous stockholders from widespread areas, from all classes and races and interests, with various sizes of holdings, may enable much capital to be assembled, but it does not encourage the building up of an *esprit de corps* among the members. A partner has some loyalty to his organization, and though he may hesitate to enter the business he may also be reluctant to withdraw. A stockholder, on the other hand, has little sentiment toward a stock certificate. He buys and sells shares with little thought of the human relations involved. Few corporations send a letter of welcome to a new stockholder. Still fewer bid good-by to the departing member.

Because the owners of a widely held corporation are numerous, widespread, and unknown to one another, and are generally uninterested in the details of management, they are also individually powerless. Their lack of mutuality of interest contributes to the social evils of the corporation, among the most outstanding of which is the divorce of ownership from management. This condition may not be so bad when all goes well, but in times of stress and financial uncertainty it may have serious consequences. These will be discussed in Chapter 28.

Flexibility and mobility. The need for flexibility and mobility may affect the choice of form of business organization. As a creature of

the state, a corporation can in theory legally do only those things which the law and the charter expressly and impliedly permit or which are necessary functions of the corporate being.* A change in its purpose or powers requires a revision of the charter. A natural person, on the other hand, may do anything that law or public policy does not forbid. A sole proprietorship or a partnership on the spur of the moment can change its location, its business, or its capital and financial setup. The general partnership agreement can be changed quickly by the mutual consent of all the partners. The facts that the members are natural persons and probably citizens and that they are the same in law as the partnership tend to give the broadest possible scope to this form of organization.

Accordingly, if businessmen think that they might want radically or rapidly to change the purposes for which they are organized, they may prefer to use the partnership form, unless, indeed, they organize a corporation with powers so broad as to anticipate all changes. Corporate charters frequently do contain extremely broad and inclusive provisions, but the courts probably would not interpret even the broadest of language to cover all possible types of business activity. Every corporation must have some fundamental purpose from which it should not deviate unreasonably. A corporation cannot be organized to "do everything."

The chartering of the ordinary corporation has been one of the peculiar residual powers of our state governments. Accordingly, a corporation generally has a legal standing only within the jurisdiction of the state by which it was created. Unless engaged in interstate commerce it can do business in territory other than that of its creator only by the consent of the other government or by interstate comity. The other states may keep a foreign corporation † out altogether or it may let it in on harsh terms. The federal government has chartered national banks and also a number of so-called "federal corporations." Most of these "federal corporations" have been given power by their charters to operate in any part of the country.

* If no creditor or stockholder objects, there may be little restriction on the scope of a corporation's activities even beyond the charter. The state will generally not bring an action to stop *ultra vires* acts, unless complaint is made.

† As the term is generally used in the United States, "a foreign corporation" means a corporation organized in some other *state*, but it can mean a corporation chartered in another country. A corporation established by Congress with powers to act throughout the United States is not a foreign corporation with respect to any state in the union. 20 *Corpus Juris Secundum*, par. 1785.

The corporation is generally not considered a citizen.* It is not protected by Article IV, section 2, paragraph 1 of the United States Constitution which provides that each state must accord to the citizens of all the states the same privileges and immunities which it gives to its own citizens. Thus, under the Constitution, the state of Indiana may permit a corporation chartered by some other jurisdiction to enter and do business in Indiana, or it may keep it out altogether provided it is not engaged in interstate commerce and provided it is not chartered by the federal government. Indiana may constitutionally, if she wishes, discriminate arbitrarily even among similar corporations seeking to enter from other states.

A corporation, however, is a person. Once admitted to a state, a corporation becomes subject to the jurisdiction of that state. It is then protected by the 14th Amendment to the United States Constitution which forbids a state to deprive any person of life, liberty, or property, without due process of law, and forbids it to deny to any person within its jurisdiction the equal protection of the laws.

A human being, on the other hand, can be, and generally is, a citizen. Under our Constitution he has great mobility and freedom of action. An individual citizen, whether acting alone or in a personal relationship, such as a partnership, with other natural persons and citizens, may do business in his own or other states, and, as we have already seen, may freely expand or curtail or adjust the scope of his activities. He may do anything that the law or public policy does not forbid.

Understanding the nature of the organization. The desirability of a form of organization depends upon how it is understood and interpreted by the courts and government officials. Is there a fair degree of certainty and uniformity in the interpretation of the liability of the members? No one wants to buy into a lawsuit. An investor does not wish to enter an organization if there is doubt as to the rights and liabilities of membership. There is fairly general agreement as to the nature of the corporation and the partnership. But there are some forms of organization that are not uniformly understood. We have pointed to the difficulties which may face the limited partner. The Massachusetts Trust is another case in point.

* The courts have decided that the stockholders of a corporation are conclusively presumed to be citizens of the state in which the corporation is incorporated for the purpose of giving federal courts jurisdiction over suits in which corporations are involved. In effect the corporation may in this respect be said to be a citizen of the state by which it was chartered.

The state of Massachusetts prior to 1912 forbade corporations to own and deal in land. Resourceful promoters and lawyers devised what is today called the Massachusetts Trust * to carry on businesses wherever the ownership of real estate was necessary. The Massachusetts Trust, however, is neither corporation nor partnership. It is really a form of the common-law trust and is sometimes called a "business trust." Assets are turned over by "grantors" to "trustees" who run the business. The trust cannot be pepetual. The term must be stipulated subject to the law. The contributors (grantors) of the assets are given shares usually called trust certificates or certificates of beneficial interest. These are freely salable. These shareholders, called beneficiaries (or *cestuisque trustent*), do not have any voice in the control. The trustees do all the active managing, and they cannot generally be ousted or even changed periodically by the shareholders. In the event of a trustee's death his successor may be selected by the remaining trustees or sometimes by the shareholders.

The contract, or deed of trust, under which the organization is started provides that the certificate holders are on a limited liability basis and that creditors are to have recourse only to the assets of the trust. Contracts, letterheads, and correspondence generally are so worded as to refer to these limited liability provisions.

As long as the holders of the certificates or shares keep their hands off the control and do not elect trustees regularly, they are generally considered free from unlimited liability.

Attempts to extend the use of the Massachusetts Trust throughout the country have met with varying degrees of success. There is no uniform interpretation of its nature. Though it is not intended to be a corporation, some states treat it as a corporation. Other states consider it a partnership and thus subject the holders of its trust certificates to unlimited liability. The United States Bureau of Internal Revenue considers the Massachusetts Trust a corporation for income-tax purposes. In still other jurisdictions its status is undetermined. Such uncertainty and lack of uniformity have naturally been a deterrent to its wide use. The Massachusetts Trust is in danger of being interpreted and treated in such a way that it will have few of the advantages of either the partnership or the corporation and many of the disadvantages of both forms of organization.

* Strictly speaking, the term "Massachusetts Trust" is a misnomer. Its use is today by no means limited to Massachusetts.

Formality of internal behavior and controls. The proprietors of the personal forms of business organization, such as the sole proprietorship or the general partnership, have greater freedom of action than do the members of the corporation or of the Massachusetts Trust. As we have already mentioned, the partners may by common consent change their business purposes. They can make important decisions with little formality. The partners may draw on their drawing account at any time. They might even by common consent take out part of their capital. Creditors probably cannot object to such withdrawal if it is in good faith. Since the partners have an unlimited personal liability, the capital, even after its withdrawal, is still theoretically available to creditors if the partnership becomes unable to meet its obligations.

With the corporation, however, the situation is far different. Even if there is a free, unappropriated surplus clearly available for distribution,* it cannot be drawn upon informally at will. When partners have formed a corporation with themselves as stockholders they are likely to continue their free and easy attitude, taking out money and leaving only a memorandum. Such memoranda, however, become debts owed to the corporation by these stockholders. This is not the right way to distribute corporate earnings. Formal action by a quorum of the board of directors, properly called, with an adequate record of the proceedings, is required to distribute a dividend. Because of the limited liability of stockholders, the distribution of part of the capital of a corporation, even by formal vote of the directors, is generally illegal.

Incidental considerations and motives. Businessmen selecting the corporation as a form of organization are influenced in their decision not only by the desire or need for adequate capital, effective division of management, limited liability, continuity, and segregation of assets. They may also have a variety of other motives. Many of the "one-man corporations," or corporations with a dominant individual stockholder, are organized as such for more or less personal reasons.

The owner of a piece of property which cannot easily be partitioned—a factory or an office building—may wish to bequeath it to his children. He could transfer it to them as joint tenants or as tenants in common. The basic idea of both these legal devices is to give each child an undivided interest in the building. Such arrangements are often not practicable. Neither may it be feasible to divide

* For discussion of nature of surplus and legality of dividends, see Chapter 14.

the building into separate parts and bequeath each portion to a separate heir. Readers of *Country Lawyer* * will recall the squabbles which developed when a father attempted to do this very thing. The heirs argued about the access to air and light and the use of the halls and stairways. A workable solution to this problem might be for the father to organize a corporation and to deed to it the building in exchange for all or practically all the stock. This dominant stockholder could then, at his death, leave the stock to his children in the desired amounts.

Then there is the desire to escape dower. In the United States, "dower" means the right of a wife to an interest—usually one third—in any real estate held by her husband during their marriage. This right is "inchoate"—that is, it is not in full existence or operation during his lifetime, but it becomes "fixed" or converted into a full right at his death.† The legislatures of many states have codified laws on dower. To mortgage or sell his land, therefore, a married man will need his wife's signature. To free him from such limitations on his actions, a man sometimes organizes a corporation in which he owns all of the stock except perhaps a few directors' qualifying shares. The corporation has power to buy, hold, and dispose of real estate through its officers who, though married, can act as such agents without regard to dower. The stock of even a corporation holding only real estate is personal property which its owner can dispose of without asking the wife.

Many other motives have stimulated the choice of form of business organization. Some of these have been legitimate, others ulterior. The corporation has been used, for instance, as a device to permit the evading of certain legal requirements. Often it has served as a screen for manipulation. It has been used as a mechanism for permitting a person to do indirectly what he cannot do directly. Both the corporation and the partnership have, in their special way, depending upon the circumstances, been used to escape or reduce income taxes. Some of these questions, of course, may concern our friends in their selection of the form of organizations, but we will defer their consideration until Chapter 30.

[Problems for this chapter will be found on pages 45-47.]

* Bellamy Partridge, *Country Lawyer,* Whittlesey House, 1939.

† This refers to the common-law right of dower. Dower has been codified and sometimes modified by legislation in many states. For instance, the inchoate right may become converted or fixed by death, or it may become fixed, probably we could say eliminated or dissolved, by divorce or by a court judgment on the husband's real estate during his life.

Chapter 3

Incorporation

After considering each type of organization, Anthony, Barr & Cooper decide that the corporation will best serve their present needs. As the accountants would put it, they decide to "sell the partnership assets to a corporation," chartered for the purpose, payment to be made in securities of the new company. The plans provide for the payment of the bank loan and for the full settlement of the accounts payable. All wages due up to the time of the organization of the new company are to be paid. The holder of the mortgage agrees to stay with the new corporation. This means leaving the $250 of unpaid and accrued interest on the books until the end of the six-month period, when this sum, together with the accumulation for the rest of the period, will be paid. Since the taxes are not yet due, the tax reserve will also be transferred to the new books as a liability.*

Compensation to the partners. The drawing and capital accounts of the partners can be summarized as follows:

	Capital	Drawing	Share in reserve for contingencies	Total
Anthony . . .	$ 60,000	$13,017	$ 5,000	$ 78,017
Barr.	44,000	5,341	5,000	54,341
Cooper.	55,000	10,885	5,000	70,885
Total.	$159,000	$29,243	$15,000	$203,243

*** Numerous arrangements, of course, are possible. If all the parties so wish, there is no reason why the corporation could not assume all the debts and purchase all the assets, provided there is agreement as to their value.**

The most difficult problem in the negotiations is this: What type of securities, and how many, shall each partner receive for his share in the old firm? The three men are general partners and have an equal voice in the business. Their agreement was to share profits and losses equally. The capital contributions of the partners, however, are not equal. If stock in the new corporation is distributed proportionally to the capital, the share of each old partner in the control of the new company will not be the same. If equal amounts of stock are distributed to each, each partner will have one third of the votes, but the capital contribution will in effect be altered.

The problem of evaluation. Since the assets of the partnership, after making provision for the debts, are in effect sold to the corporation, the problem of the evaluation of the business is always present. The fact that the partnership business is sold to the corporation for stock rather than for cash does not affect the nature of this problem. If the company has been making a smaller rate of profit than the expected reasonable and normal return in the industry, the assets may be overvalued on the books, and the selling partners then should be given securities of a value less than their indicated capital. In such case it might be necessary to write down the value of the assets.

If, on the other hand, the company has been earning at a rate substantially higher than that made by similar businesses, the assets are in effect undervalued on the books. In that event the selling partners might be given securities of a value greater than their proprietary interest as shown on the balance sheet. It might be necessary to write up the value of the assets, that is, to include an item of good will. The introduction of such good-will item would be justified in theory, first, because it represents value arising out of a superior earnings record, and, second, because it is purchased by the new corporation from the partnership.

Though the giving of extra stock to the selling partners and the creation of a good-will item seem to be the orthodox method of recognizing the superior earnings record of the partnership, a different method is also possible, especially if additional stock is to be sold to various outsiders who are willing and able to "buy into" the new corporation at a new price above that paid by the partners. This does not put a good-will item on the books, but since the excess paid by the additional stockholders must go into a surplus for the benefit of *all* the stockholders, this transaction does in effect give

the old partners a higher price for their assets than that actually shown by the stock issued.

The problem also arises as to exactly which portions of the proprietary interests of each partner shall be "bought" by the new company and which shall be settled individually with each partner before the transfer takes place. For instance, shall the drawings be left and compensated for by stock in the new company or, since they are really undistributed profits, shall they be withdrawn by the partners? Then, also, there is the unique and interesting "reserve for contingencies." This was created out of earnings over the years and is really also an undistributed-profit account, presumably owned by the partners in accordance with their agreed share in the profits, namely, equally.

Finally, there is the treatment to be given Anthony. It will be recalled that he wishes to retire from the active management but to retain an investment in the business. What kind of securities shall be given to him and how many?

The plan. The result of the negotiations is an agreement under which each partner is to take out his drawings in cash,* Anthony is to be given a prior claim security, without voting rights, of an amount equal to his capital, and Barr and Cooper are each to be given common stock in the new corporation equal to their respective capital plus one half of the reserve for contingencies. Mr. Anthony is willing to give up his share in this reserve in exchange for the priority assigned to the securities to be given him in exchange for his interest.

The new corporation is immediately to sell $61,000 par value of common stock to three or four interested businessmen in the community at $125 cash for a $100 par share. The $25 premium is justified by the past success and reputation of the company. This will go into a paid-in surplus account.†

* The amount of cash on hand and in the bank is not sufficient to pay all the items that are to be paid in cash, namely, drawings and many of the current liabilities. To raise the money it might be necessary to sell some of the more liquid assets and investments, but it will be noted that the sale of additional stock takes place immediately and some of the proceeds from this can be used to replenish the depleted assets as well as to add to the property owned by the company.

† The suggestion was made that part of this premium be used to write off the intangible items. While the company does apparently have excellent credit and good earning capacity, it might be better and more conservative accounting to have no intangible accounts on the books. Strictly speaking, the old partners have been reimbursed for the good-will and intangible items, since

After all these transactions have been carried out and the necessary debts paid off, the right-hand side of the balance sheet will appear as follows:

	Mortgage..	$ 24,000
	Accrued interest on mortgage..	250
	Tax reserve	5,400
	Securities to Anthony....	60,000
	Common stock par......	175,000
	Capital surplus ...	15,250
		$279,900

Since important decisions are yet to be made, several of these items are indefinite and incompletely described. Exactly what kinds of securities shall be issued? What shall be the rights and obligations of the parties?

Multiplicity of provisions in security contracts. In analyzing corporations one is frequently impressed by the numerous types of bonds and stocks outstanding. Securities represent contracts. Just as ordinary agreements among individuals contain various different terms, so stock and bond contracts may include an almost infinite variety of provisions. Such multiplicity of terms generally results from the needs of the issuing corporations and from the demands of the purchasers of the security. All provisions must, of course, be included in the agreement before the securities are issued. Any subsequent changes would require the consent of the parties. Therefore, the parties should consider all conditions and requirements in advance so as to be ready as far as possible for any development.

It will be recalled that Mr. Anthony wishes to be relieved of all responsibility in the active management while continuing as an investor in the business. Barr and Cooper, together with any new members to be added, will be the active stockholders in the corporation.

It would be possible to give voting common stock to Barr and Cooper and any new stockholders and to allot nonvoting common

they were paid their drawings and capital stock on the basis of their value according to the books of the firm including the intangibles. The new stockholders in a sense can be said to have paid for this good will since they paid a premium for their shares.

stock to Mr. Anthony. Anthony would then be relieved from responsibility in the management, but he would not have the priority which the others agreed to give him in return for his surrender of a share in the reserve for contingencies. Furthermore, there is an increasing tendency on the part of government and stock-exchange authorities to frown upon the issuance of nonvoting common stock. Though the proposed corporation will be small and closely owned and will, therefore, have little immediate contact with control agencies, it might grow and be widely held some day. There is no advantage in flying in the face of accepted regulations.

A better solution would be to allot common stock to Barr and Cooper and for sale to the outsiders and give nonvoting preferred stock to Mr. Anthony. If Anthony is to have no additional share in the income of the company beyond his regular dividends, the preferred stock can be made nonparticipating. In this case he would give up his right to participate in the management in exchange for a prior claim on the earnings, but he would have no right to receive additional or extra dividends.

Preferred stock to Mr. Anthony. Mr. Anthony favors this solution to the problem, and it is decided that he shall receive $60,000 of preferred stock in the corporation. He remembers, however, that he was the original proprietor, the well-known "Bill" of the early business. If the company happens to become even more profitable, he does not want all the extra earnings to "slip away." He figures that part of its future success will have been due indirectly to his prestige and spadework. He quite naturally wishes to reserve a right to participate in such additional earnings. This participating privilege may take different forms. The company could first pay the specified dividend on the preferred stock and next distribute to the common stock an amount per share equal to that given the preferred. After this the preferred could be allotted extra dividends, if available, up to a limited amount, say $3 per share. Finally the common stock would get the balance of any earnings distributed. This is called limited participation. In contrast, unlimited participation would give the preferred stockholder the right to share pro rata with the common in all the earnings distributed after each had received the same rate.

The preferred stock could be given conversion privilege. When preferred stock is convertible, the holder has the right to demand common stock in exchange for preferred. He may exercise this option

in accordance with pre-arranged terms. Thus, if Anthony holds this kind of preferred stock, he may resume his old position as a participant in the management and a recipient of residual earnings, giving up, of course, his position as a preferred stockholder.* A still different type of participation consists of stock purchase warrants attached to a bond or preferred stock. These give the holder the right to buy a certain quantity of common stock at a stipulated price. This privilege may become of real value if the market price of the common stock rises substantially. Its exercise merely gives the holder some common stock in addition to his preferred holdings.

Mr. Anthony may insist on the inclusion of various "protective provisions" in his preferred-stock contract. Preferred stock of industrial and public utility companies is generally cumulative; that is, if "the company passes the dividends" (or as it is often put, "the directors take no action") on the preferred stock, such unpaid or passed dividends are "accumulated" and added to the regular rate for the next quarter, year, or number of years until dividends are resumed. All dividends in arrears, as well as those for the current year, or for the current period, must then be paid in full before dividends may be distributed to the common stock.

Many preferred-stock agreements provide that if the dividends are not paid, say, for three consecutive quarters, the holders get a special right to vote, which right may range all the way from one vote per share, like the common, to the privilege of electing a majority, or even in some cases, all, of the board of directors. Anthony may insist on such provisions not only to give immediate protection but also to facilitate the marketability and general credit position of his stock. It is, of course, obvious that the concessions or special privileges which Mr. Anthony can command depend upon the "horse-trading" abilities of the parties.

Following a common practice in preferred stock financing, Anthony may also demand the inclusion of provisions protecting the relative position of his security. The consent of two thirds or even three fourths of the preferred stock is often required before the company may issue and dispose of prior securities or even additional preferred stock of the same class. The preferred-stock contract may prohibit the board of directors from paying dividends on the common stock under certain conditions. These restrictions must be carefully stated in specific language.

* For a further discussion of convertible securities, see Chapter 11.

Details of security contracts are included for the benefit, protection, and convenience of the corporation as well as of the investor. The corporation may insist, for instance, that if valuable privileges, such as the conversion rights, are given to the bondholders or preferred stockholders, the directors must be given the privilege to "call" the securities at any time according to previously announced terms. This is not the only reason for inserting the call feature, but it is a very important one.* With adequate notice the corporation may thus force the holder of convertible securities to convert within a certain time; otherwise the corporation will call such bonds or preferred stock. The holder of the convertible security may thus find himself in a state of uncomfortable indecision. Practically all bonds and many preferred stocks are callable.

We have thus seen that Mr. Anthony could be given cumulative, nonvoting, callable participating or even convertible preferred stock, shielded by numerous protective devices. Any of these provisions could be omitted or made different from those which we suggested, with the possibility of numerous combinations.

Treatment of mortgage holder. So far we have considered only the treatment given to Mr. Anthony. But what about the mortgage holder? We have assumed that he "goes along" and remains a creditor of the corporation. What kind of security will be issued to him? He might accept debenture bonds, which are based only on the general credit of the company. They are in the position of the ordinary unsecured note. The holder of the note and mortgage is likely to insist, however, that the new note or bonds be backed by the same security as before. The choice made by him and the provisions suggested by the company will depend upon numerous circumstances.

Provisions in bond contracts. Whether the bonds are mortgage or debenture, they may be given many of the characteristics already described for the preferred stock. They will probably be made callable. They may be convertible and may even have a stock purchase warrant attached.

The bonds may be registered or coupon, or (less frequently) registered as to principal only. If a bond is registered, it is payable on its face to a specified person only. The company sends him a check for each interest payment and at maturity for the principal. To transfer a registered bond the purchaser must send it in to the company which will then issue a new one in the form requested.

* For further discussions of the call feature, see Chapter 6.

If the bond is coupon, both the interest and principal are payable to bearer. The interest for each period is represented by a small attached piece of printing called a coupon. The interest is then payable to anyone who merely clips the appropriate attached coupon at the proper time and forwards it through the banks for collection, much as he would forward a check or a note about to fall due. The principal, as just stated, also is payable to the bearer. Coupon bonds pass freely from hand to hand without formality.

If the bond is registered as to principal only (sometimes the term "registered coupon" is used), a bearer coupon is to be clipped on each interest date and sent through for collection, but the principal is registered and can be paid only to the specified holder. This combination form is not widely used.

A coupon bond is likely to command a slightly higher price than a registered bond of the same issue. Though coupon and registered bonds are generally interchangeable at the request of the owner, frequently without charge, nevertheless, to change the corporation's record when the registered bond is transferred involves extra trouble, delay, and expense. A coupon bond, on the other hand, is transferable by mere delivery or passage from hand to hand. The corporation makes no change on its records; in fact, it is probably not even informed of the transfer.

An individual who intends to hold the bond for many years will generally want the registered bond, while the short term investor may prefer the coupon bond. If a registered bond is lost it may be duplicated. The loss of a coupon bond, however, is almost irreparable, since, according to the law of negotiable instruments, if such a bond falls into the hands of a purchaser who pays value without notice of its loss or theft, the innocent purchaser gets good title. The corporation cannot safely replace lost or stolen coupon bonds.

The holder of the note and mortgage on the partnership assets may demand that his bonds be protected by a sinking fund. By such provision in the ideal situation the company might be required to set aside and invest each year out of earnings a sum which if built up, with interest, over, say twenty or thirty years, would be sufficient to retire all the bonds. The amount to be so set aside each year can be fixed in accordance with any of perhaps a dozen different formulas, ranging from a percentage of the gross earnings to a more or less arbitrary annual figure, or to the most precise mathematical calculation. Instead of investing the sinking fund in its own

business or in some other institution, the company might use each year's fund immediately to buy up and retire the appropriate amount of bonds. Failure to set aside the sinking fund may give the bondholders a right to bring special legal action against the corporation.

Instead of providing for a sinking fund, a corporation may find it advantageous to issue what are known as serial bonds. For instance, if the over-all term is ten years, a specified one twentieth of the bonds could be made to mature at the end of the first half year, one twentieth at the end of the second half year, and so on, until at the end of the twentieth period, only one twentieth of the total remains to be paid. If the longest term were twenty years, one fortieth could mature at the end of each half-year period.*

The gold clause was found frequently in bond contracts issued before 1933. This clause provided that payment of principal and interest was to be made in gold coin of a weight and fineness in effect at the time of the issuance of the bonds. Gold bonds became the vogue in the United States toward the end of the nineteenth century when investors both here and abroad feared that this country would abandon gold and be forced into a bimetallic, or what would really have become a silver, standard. Alarmed investors began to demand gold bonds instead of the ordinary dollar bonds. Congress removed this source of danger for the time being by the passage of the Gold Standard Act of 1900, but the clause continued in common use. The unfortunate experience of many countries with inflation during and shortly after World War I gave an additional impetus to the use of the gold clause. In such situations the weight of custom, if nothing else, would have caused the holder of the mortgage to demand the insertion of this provision. A joint resolution of Congress in 1933, however, nullified the gold clause in American bond contracts, and it is no longer used, or, if present in old bond contracts, is not enforced.

The holders of bonds may demand even further protection. They may insist, for instance, that the bonds comprising the present series be the only ones that can be issued under that mortgage. This is then known as a closed-end mortgage. In contrast with this we often find the open-end mortgage, under which provision the company may sell additional series of bonds under the same mortgage, possibly without limit. All these issues will then get the same pro rata mortgage claim. Sometimes we find the limited open-end

* A discussion of the relative advantages and disadvantages and the uses of the sinking fund and the serial bond will be found in Chapter 10.

mortgage. This provision allows a further issuance of bonds under the mortgage, but it limits the additional bonds to a stipulated amount or requires that they meet certain tests; for instance, the amount issued must not exceed two thirds of the value of any new property acquired, or the interest on all the bonds, including that on those newly issued, must be covered by the previous earnings by at least two times.

The mortgage agreement may contain the after-acquired property clause. Under this provision any additional real property coming into the hands of the corporation is to be automatically covered by the existing mortgage. The combination of the closed-end provision with the after-acquired property clause places a strait jacket upon future financing by the company. These two provisions ought not to go together, but if they are to be used, the company will do well to protect itself with the call provision, under which it may retire the bonds.

It is now apparent that a bond contract, like that of a preferred stock, may carry numerous provisions. Anthony, Barr & Cooper's security could, for instance, be designated as a first mortgage, sinking-fund, coupon, closed-end, callable bond with the after-acquired property clause.

A preview. Let us assume that all the foregoing factors have been considered and acted upon. The corporation has now come into existence. There are, however, numerous problems to be considered. Any adequate discussion of the detailed accounting processes involved in the "sale of the partnership assets to the corporation," though extremely important, would, in the scope of the present treatment, carry us too far afield. Numerous problems strictly in the field of finance must occupy our attention. These problems may be classified under two heads: (1) corporate—that is, problems involving a company's financial policy; and (2) social—that is, problems created by the impact of the corporation upon our economic structure and our social thinking. Some of these questions belong in both groups and interact upon each other. The corporation's approach to its financial policies may have important effects upon the experience of individuals and upon social attitudes. Social behavior and pressures, in turn, may have far reaching influences upon corporate organization and practice.

Summary. In the first three chapters we have watched Bill's candy-peddling enterprise develop into a large business. With such growth came problems of finance and organization. Most of these will be

COMPARISON OF THE GENERAL PARTNERSHIP AND THE BUSINESS CORPORATION

Point of comparison	Partnership	Corporation
How is the organization formed?	By informal agreement among partners, oral or written, generally written (articles of co-partnership).	By obtaining formal permission from the state by the required number of incorporators (often three) in compliance with law. (Charter or articles of association.)
What is the basic relationship among the members—that is, among the partners or among the stockholders?	Personal (*personae delectus*).	Impersonal.
Is the organization a separate entity—that is, is it separate under the law from "its members"?	No; the partners *are* the partnership. In a few special situations the statutes recognize the partnership as an entity.	Yes, generally, but in some instances courts have "punctured the corporate entity." (See Chapter 30.)
In general, how is the organization controlled and managed?	By majority vote of the partners, each partner having one vote. Each partner can bind the organization and the other partners within the scope of the business.	Directors are selected by majority vote of the shares at a meeting held according to law, each voting share generally having one vote. Board of directors manages the corporation through selected officers. Stockholders as such cannot act as agents for the corporation.
What is the procedure in changing the nature of the business?	By agreement among all the partners.	By amendment of the charter, requiring generally the consent of a specified majority of the stock.

Comparison of the General Partnership and the Business Corporation (*Continued*)

Point of comparison	Partnership	Corporation
What are the requirements necessary to increase or decrease the authorized capital?	Mere agreement among all the partners.	Amendment of the charter. Creditors must not be directly injured by a reduction. Consent of specified majority of stockholders generally required.
What procedure is required to "draw out" the earnings of the company?	Informal process, "Just leave a record of the amount."	Formal resolution of quorum of board of directors at properly announced meeting.
Can a member bring a lawsuit against the organization?	No; but in certain cases a partner may go into equity court and seek an accounting.	Yes.
Can a member freely transfer his interest or share?	No; the arbitrary withdrawal by a partner would dissolve the partnership.	Yes, although certain limited restrictions are sometimes permitted.
How much freedom of movement does the form of organization possess?	Great freedom theoretically, since members are generally "citizens."	Some freedom. Corporation might not be recognized outside of state of its creation unless it is engaged in interstate commerce. Actually there is much comity among the states.
How is the organization dissolved?	By expiration of term or accomplishment of object, by agreement among members, and by a variety of conditions or developments. Some, such as death of a partner, bankruptcy of a partner, or bankruptcy of the firm, will	By expiration of the term for which chartered or if perpetual by certain processes under the authority of law. Circumstances affecting members individually do not affect the corporation. Corporations may through action of stock-

Comparison of the General Partnership and the Business Corporation (*Continued*)

Point of comparison	Partnership	Corporation
	automatically dissolve the firm. Others, such as insanity, incompetence, or misconduct of a partner, or the utter improbability of operating at a profit, may be a cause for dissolution upon application to a court of equity.	holders apply for permission to dissolve or to merge into another corporation. May be ended by bankruptcy proceedings. The state under certain conditions, such as nonuse of franchise or illegal or *ultra vires* acts, may take steps to dissolve the corporation.
What is the liability of the members?	Unlimited. Sometimes joint or several; somesometimes joint and several. Actually this unlimited liability is generally of little value to the creditors.	None, except in some states double liability in banking corporations and occasionally for unpaid wages or debts due to suppliers of materials in case the corporation becomes bankrupt. This is generally of little value to the creditors.
An organization earns, after all expenses, costs, and interest, a total net income of $60,000. There are 6 equal partners or 6 equal stockholders. Disregarding exemptions and personal deductions and credits, what is the taxable income of the organization?	None. A partnership has no income.	$60,000.

Comparison of the General Partnership and the Business Corporation (*Continued*)

Point of comparison	Partnership	Corporation
If nothing is distributed to the members—that is, if the entire net income is left with the business—what is the taxable income of each member?	$10,000—one sixth of total to each partner. The federal tax law considers the income of the partnership as income of the partners.	None. (There are certain exceptions. See Chapter 30.)
If the entire income is distributed, what is the taxable income of each member?	$10,000 (same as if it were not distributed).	$10,000.
If nothing is distributed to the members, does this affect the tax liability?	No.	Probably. If earnings are unjustifiably withheld, there may be a special federal tax on the amount not distributed. Also special tax on certain personal corporations. See Chapter 30.

discussed in detail in the chapters which follow and need not be summarized at this point. But the chief characteristics of the general partnership and the business corporation should be reviewed. The nature of the sole proprietorship, which is the oldest form of business organization and which prevails in agriculture and in many forms of small business, can easily be worked out from the description of the partnership. In law, though not in accounting, the sole proprietor *is* the sole proprietorship, just as the partners *are* the partnership. We have also included a few of the elementary but basic differences between the corporation and the partnership in respect to the treatment of their income under the federal tax law.

PROBLEMS

Chapters 1, 2, and 3

1. In his *Memoirs,* Jay Cooke states that his banking firm (partnership) had had some difficulties in that the profits were distributed

among the partners instead of being held in liquid cash securities. He concludes that if he were to "pass through the same experience again, he would capitalize all profits except moderate living expenses." In what sense is the word "capitalize" used in this quotation?

2. The prospectus (dated April 2, 1947) of New England Gas and Electric Association, a Massachusetts trust, for the sale of common shares of beneficial interest, par value $8 per share, gives certain provisions of the Declaration of Trust, among which are:

> The trust property shall be held in trust by the trustees in the manner and with and subject to the powers and provisions of the Declaration for the benefit of the shareholders.
>
> . . . every written agreement and obligation entered into by or on behalf of the Trust shall refer to the Declaration and particularly [to the part] providing that every person, firm, association, trust, and corporation shall look only to the trust property for the payment of money for damages or otherwise. No trustee, officer, or agent of the trust shall be entitled to look to the shareholders personally for indemnity against any liability incurred in the execution of the trust or to call upon them for the payment of any source of money or any assessment except in the case of shares of the trust which by their express terms are issued part-paid and assessable and then only as provided therein.

a. Why are each of these provisions included?

b. Why are the shares called "common shares of beneficial interest"?

c. This association is a "partnership type of trust." Are Massachusetts trusts generally considered as earning an income of their own under the federal income tax regulations?

d. Are the above provisions necessarily effective in protecting the shareholders from liability?

3. "The charter of a corporation having a capital stock is a contract between three parties and forms the basis of three distinct contracts."—Cook on *Corporations,* Baker Voorhis Co., 5th ed., Vol. 2, Sec. 492.

Who are the three parties? State the basic nature of each of the three contracts.

4. Limited liability in the case of the corporation comes from statute. How is such limited liability gotten in the case of the Massachusetts Trust? How is it gotten in the case of the limited partnership?

5. Refer to "Extracts from Original Articles of Association, with amendments thereto, of Union Pacific Railroad Company" in Appendix B.

a. Do you see any evidences in this charter (Articles of Association) that the original company was chartered by the United States?
b. Is the preferred stock of the Union Pacific Railroad Company participating? Is it cumulative? Would you say that it carries voting rights? (See also Chapter 5.)
c. Does the charter of the Union Pacific Railroad Company give perpetual life to the company?
d. Identify the section providing for limited liability of the shareholders.

6. Following mainly the New York law of 1811, the states began to substitute general incorporation laws for the process of negotiating special charters with the legislature. What advantages does a general incorporation law have over special incorporation?

7. A stockholder happens also to be an officer of his corporation. Is his salary subject to social security taxes? A partnership pays a salary to one of its members. Is this salary subject to social security taxes? Is this partner's "salary," as such, subject to the federal individual income tax? What about the salary of the officer of the corporation? A partner draws out a part of his share of the earnings of his firm? Is this withdrawal as such taxable to him as income? The stockholders of a corporation receive cash dividends by appropriate and legal action of the board of directors. Are the stockholders subject to the federal income tax on these dividends?

8. Prepare a table showing the advantages and disadvantages, from as many points of view as you can name, of each of the following forms of organization: general partnership, limited partnership, Massachusetts Trust, and the corporation.

Part II

Corporate Problems

Chapter 4

Capital Stock

CORPORATIONS may be stock or nonstock. Membership in a nonstock corporation, such as a church or a fraternity, can come only through individual selection and through the meeting of the conditions of the organization as set forth in its rules and bylaws. Membership in a stock corporation, such as the typical business corporation, on the other hand, can come only through the acquiring of its stock. Such stock is a symbol of membership and ownership and may as a general rule be freely transferred. Since the only way to become a member is through the ownership of its stock, it follows that such corporation cannot come into existence without the issue of stock. Stock is, accordingly, the fundamental and basic form of corporate security. The consideration received by the issuing corporation for such stock at the time of its sale becomes the initial source of its permanent funds.

Corporations first financed by stock. The early corporation, developing in many instances out of the partnership,* was at first financed only by means of stock. This stock was divided into shares, each of which was exactly like all the others and represented an undivided and aliquot part of the total. The typical corporation was financed much in the same way as the commercial bank of today, which raises its permanent funds as a general rule only by the issuance and sale of shares of one kind of capital stock.

Comparison of stocks and bonds. Corporations may also raise long-term funds by the issue and sale of bonds, often somewhat loosely referred to as "funded debt." The chief differences between stocks and bonds are set forth in outline form:

* While the development from the partnership to the corporation was a common process, the impression must be avoided that this is the only method. Most corporations are organized in the beginning as corporations or to take over the business and assets of other corporations.

Stocks	Bonds
1. Stocks represent a proprietary or equity interest. They are often called equity securities.	1. Bonds represent a creditor or legal interest. They are often called nonequity securities.
2. Stockholders have primary and direct rights in the election of the board of directors and in certain other important matters.	2. Bondholders generally have no immediate share in the management. In case of financial difficulties, they may be given some form of contingent control.
3. Stocks do not carry a fixed rate of dividend. The payment of dividends, even of preferred dividends, is entirely at the discretion of the board of directors.	3. Bonds carry a legal promise of a fixed rate of interest.
4. Stocks have no maturity date. There is no promise by the corporation to repay anything, not even the par value of preferred stock.	4. Bonds carry a maturity date. There is a legal promise to repay the principal.*
5. Stocks represent a residual interest, the stockholders having an equitable interest in the remainder of the assets and earnings after all prior claims and shares have been paid.	5. Bonds represent a prior legal claim, and the holders generally have no legal right to anything above that promised them by the contract.
6. No business corporation can exist without stock in some form.	6. A business corporation need not have bonds outstanding.

* There have been some illustrations of perpetual bonds such as the British consols. Some of our railroad bonds have such a long term as to be virtually perpetual bonds. In practice, many bonds are to a certain extent perpetual in that the debtor follows the practice of refunding rather than paying them off.

Let us first consider the nature of capital stock, leaving the subject of bonds for later treatment.

Powers and rights of stockholders. We have already seen that the corporation, as an entity, owns the assets. The stockholder merely has an equity in the corporation. The stockholder and the corporation are not the same individual, not even in a "one man corporation." The stockholder can bring a lawsuit against the corporation, and the corporation can sue the stockholder. The stockholder, as a stockholder, does not act as an agent for the corporation. He cannot interfere with the normal and legitimate processes of his corporation.

Though he cannot act for the corporation or interfere with its

normal processes, the stockholder does have broad powers and rights. They are six in number:

1. The right to vote at stockholders' meetings, and, in some cases, on extraordinary matters by a referendum ballot.

2. The right to receive in proportion to his holdings any dividends declared by the board of directors to his class of stock and any assets available to be distributed in the event of liquidation of the company.

3. The right to maintain his relative position in the company.

4. The right to sell and transfer his stock.

5. The right to inspect the books and papers of the corporation.

6. The right to interfere in the management under certain extreme and unusual circumstances.

1. *The right to vote at stockholders' meetings, and, in some cases, on extraordinary matters by a referendum ballot.* The broadest power of the stockholder is the election of directors. He also votes on various extraordinary questions which come before the stockholders' meeting or are submitted on a referendum ballot. These unusual matters include the recapitalization of the corporation by decreasing the par value or the number of shares; the sale of the corporation's permanent assets; the dissolution of the corporation (with the consent of the state) or its merger with another company; the amending of the charter or the bylaws; and, sometimes, certain unusual matters of operational policy, such as officers' bonuses and pensions. The statutes or sometimes the corporation bylaws often require that these extraordinary and referendum changes be made only with a two-thirds or three-fourths majority vote.

The board of directors, when duly elected, is responsible for the operation and the finances of the corporation. For the most part its powers may be delegated to properly elected or appointed officers who then are the agents of the corporation. Powers involving the exercise of discretion by the board of directors as a body, such as the declaration of dividends, cannot be delegated but must be performed by the board. As we have already seen, all actions of the directors must be taken by formal resolution, passed at properly announced meetings attended by a quorum. Directors cannot vote by proxy. As a general rule no individual director, as a director, may bind the corporation. If he is also an officer, he may, of course, in that capacity act as an agent for the corporation. The board of directors comprises an independent body. The directors are not the agents or employees of the stockholders. They are in a position of

trust and confidence both in respect to the stockholders as a body and to the corporation.

Though there are some matters which may be voted by ballot *in absentia,* as a general rule the right of stockholders to vote must be exercised collectively at regular or definitely called meetings. Under the early common law each stockholder, regardless of the amount of his holdings, had one vote, this being somewhat similar to the practice in the partnership or in the present-day cooperative. By modern corporation procedure and, it may be said, by custom with almost the force of common law, the most frequent practice now is one vote per share. The management in announcing the stockholders' meeting indicates the date on which the stockholder's name must be on the record in order to give him the right to vote. This is called the date of record.*

2. *The right to receive in proportion to his holdings any dividends declared by the board of directors to his class of stock and any assets available to be distributed in the event of liquidation of the company.* The board of directors has the final decision as to whether, and how many, dividends shall be paid. Outside the general prohibition against paying cash or property dividends out of capital, the only basic limitations on the power and discretion of the directors are: (a) If any dividends are paid, they must first be given to any class of stock which happens to have prior claims. (b) In deciding whether any, or how many, dividends are to be paid, the directors must act in good faith and for what they honestly consider the long-run welfare of the corporation. Even though earnings are substantial, the board may consider it wise to retain them in the business either because of the need for expansion or because the condition of assets does not favor a cash disbursement. Unless the dividend-hungry stockholders can prove that the board has acted abusively or fraudulently or oppressively in making its decision, they will receive scant sympathy in any equity suit they may bring to compel the payment of dividends.

Dividend announcements generally carry three dates: (a) the date on which the directors took action; (b) the date of record, that is, the day on which the directors close the stock books for the purpose of determining to whom the checks shall be sent; † and

* For a further discussion of the voting rights of the stockholders, see Chapter 28.

† Unless ruled otherwise, the stock becomes ex dividend the second full business day preceding the day of record. Buyers of stock on the ex dividend date

(c) the announced date on which payment will be made. Frequently a period of a month or two elapses between the first and last of these dates.

Closely related to the right to receive dividends is the right of the stockholder to share pro rata in the proceeds of dissolution after all prior claims have been met. Though certain classes of stock may have a preference, the statement is, nevertheless, true that stock as a general rule is a residual claimant. Preferred stock is generally assigned a liquidation figure which is often par and accrued dividend or in the case of no-par stock is a definite figure per share plus accrued dividends.

3. *The right to maintain his relative position in the company.* Since the two fundamental rights we have so far discussed are the right to vote (generally in proportion to the number of shares held) and the right to receive any legally declared dividends (also in proportion to the holdings of that class of stock), as well as to participate pro rata in case of dissolution, it follows that the stockholder has the right to insist that his relative position in the company be maintained.

Assume the following figures:

Assets of various kinds....	$10,000	Common stock, 50 shares, par $100	$5,000
		Surplus	5,000

If Mr. Smith owns ten shares of common stock in this company, he should have one fifth of the total votes. If the directors declare total dividends of $100, he should have the right to receive one fifth of them, or $20. If the corporation decides to dissolve with the approval of the state, Mr. Smith should have the right to one fifth of the assets remaining after all claims or costs have been paid. He has the right to maintain his position.

get only the stock certificates, the dividends being paid to the "stock of record." If a purchase is made so close to the ex dividend date as to prevent the transfer of the stock on the books of the corporation by that day, the dividend check will be sent to the person who is the holder on the books that day. An adjustment for this may be made in the price paid for the stock in the settlement between the parties and the brokers. In determining the ex dividend date, remember that Saturday is not a full business day. Thus, if the day of record is Monday, the ex dividend date is the preceding Thursday.

The net worth or proprietary interest of the common stockholder in the above illustration is $10,000. Since there are fifty shares of common stock, the book value per share is $10,000 ÷ 50 or $200. If Smith owns ten shares, he has an equity of $2000 in the corporation. If the corporation is earning a net of $2000, or 20 percent on its assets, the earnings per share are $40. The amount equitably attributed, though not necessarily paid, to Mr. Smith's shares will be $400.

Assume now that the corporation sells to Mr. Newman fifty additional shares of common stock in all respects similar to that already outstanding, and that Mr. Smith is given no opportunity to purchase any of these shares. Mr. Smith now has only one tenth of the voting rights and will get only one tenth of any dividends disbursed by the company.

If the stock is sold to Mr. Newman for $150 a share, the new balance sheet becomes as follows:

Assets including the additional cash received...	$17,500	Common stock, 100 shares, par $100	$10,000
		Surplus	7,500

The book value of a share is now $175 instead of $200.* If the corporation continues to earn the same percentage on its assets as before, namely 20 percent, the net income will now be $3500, or $35 per share, instead of $40. It is, therefore, clear that Smith's rights not only as to control but also as to earnings and assets have been decreased. The directors are guilty of a breach of trust in selling the new shares to Mr. Newman without first offering them to the existing stockholders. It is as though they had handed part of Mr. Smith's share in the control and part of his right to any dividends to someone else without compensation to him.

To prevent such an unfair situation as this, the law early in the nineteenth century developed the doctrine of the pre-emptive right. According to this principle, when a corporation sells a new issue of voting or surplus-sharing stock, the owners of the already outstanding voting or surplus-sharing stock shall have the first right to purchase it in proportion to their holdings, so as to enable them to maintain their relative position in the company.

* The concept of book value of a share of common stock is discussed more fully in Chapter 8 and in Appendix A.

If this rule had been applied in the above theoretical illustration, Mr. Smith would have been permitted to preserve his position by buying one new share for each old. If he had exercised this option, he would have had twenty shares after the transaction, which would still be one fifth of the total. The book value and earnings per share would have fallen, but he would continue receiving one fifth of the total dividend payments and in case of liquidation one fifth of the residual assets. The fall in the book value and in the earnings per share would not harm him in the aggregate or proportionally to the other stockholders, as he would theoretically have received his new shares at a "saving" arithmetically exactly enough to make up the loss. This leads to the valuation of stock rights which will be discussed in Chapter 15.

Holders of common stock have no pre-emptive right to the issue of nonparticipating and nonvoting preferred stock. Such stock has no share in the surplus and no portion of the control. Nor do the holders of nonparticipating nonvoting preferred stock have a pre-emptive right in the issuance of additional common stock. If the preferred stock is voting and participating, however, the pre-emptive rule applies in both directions. The voting and participating preferred has a pre-emptive right in the issuance of additional common stock and the common stock has such right in the sale of more preferred.

Common stockholders also may have a pre-emptive right to their proportion of a new convertible bond issue, but the owners of such convertibles have in turn no pre-emptive right to subscribe to any new common stock unless they have actually converted, in which case they have the pre-emptive right by virtue of their position as stockholders.* Treasury stock—that is, a corporation's own stock originally issued in return for full value and bought back by or donated to the corporation and held by it—can be resold without it being first offered to existing stockholders. The pre-emptive right is generally held to apply only to new issues of stock, not to a continuing sale of stock already authorized, unless a very long time has elapsed since the last sale.†

Courts generally agree that if the new stock is to be issued in exchange for specific property or services, the pre-emptive right does

* Convertible bond contracts do contain provisions safeguarding the convertible bondholder against dilution. See Chapter 11.

† The case of *Stokes* v. *Continental Trust Company of City of New York* (1906), Court of Appeals of New York, 78 N.E. 1090, contains an excellent discussion of the principle of pre-emptive right.

not apply. To the extent that the old stockholders do not have the specific property or are not able to render the peculiar service required, they cannot possibly exercise the right. There would be no point in giving them something they could not use.* But the argument has also been advanced by some courts that the property or service acquired will become a part of the assets of the corporation and will benefit both old and new stockholders alike.† The pre-emptive right does not apply to stock lawfully issued in order to accomplish a consolidation.

The pre-emptive right became a part of the law when corporate organizations were simple and there was generally only one kind of security. ‡ Today the more complex capital structures make this principle difficult to enforce or to apply, and there is some tendency in the statutory law to eliminate or at least to modify the common-law doctrine. The acts of the legislature in some states, for instance Delaware, allow companies to abolish the pre-emptive right by a statement to that effect in their charters. Other states, such as Indiana, provide that the right does not exist unless the charter specifically includes it or unless the directors adopt it by resolution. Such elimination or weakening of the pre-emptive right will have serious effects unless stock is sold at its full value and unless laws prohibiting manipulation and discrimination against minorities are strengthened and enforced. Setting the subscription price of new stock at that figure at which the old was sold does not necessarily protect the interests of the old stockholder. The value of the stock

* See Lewis Mayers, *Introduction to the Law of Business Corporations,* Longmans, Green & Co., 1939, pp. 47-48.

† There are weaknesses in these arguments for excepting stock issued for property or services from the pre-emptive privileges. The fact that the old stockholders do not have the property cannot justify a possible thinning out of their control or interest. The fact that the property becomes the assets of the corporation to be used for the common benefit is no more true when stock is sold for property than when it is sold for cash. Cash could probably have been used to buy the property. Moreover property acquired by a corporation is likely to be liberally valued with a correspondingly excessive issue of stock in payment.

‡ See Henry S. Drinker, "The Pre-emptive Right of Shareholders to Subscribe to New Shares," *Harvard Law Review,* vol. 43 (Feb. 1930), pp. 586-616, for history of this right. Mr. Drinker (p. 590) refers to *William Gray* v. *The President, Directors and Company of the Portland Bank* (1807), 3 Mass. 363, as possibly the first case upholding the pre-emptive right.

See also Alexander H. Frey, "Shareholders' Pre-emptive Rights" in *Yale Law Journal,* vol. 38 (Mar. 1929), pp. 563-83. Mr. Frey (p. 572) thinks the pre-emptive right is feasible regardless of the complexity of the capital structure of a corporation.

may have risen greatly since the first shares were issued, and sale of new stock to a newcomer at the previous subscription price may decrease the present equity of the old holder.

4. *The right to sell and transfer his stock.* One of the advantages of the corporate form of business organization is the free transferability of its securities. The assets of the corporation belong to the corporation but the shares of stock belong to the shareholder. Shares of stock are personal property which generally can be transferred with little legal formality. The development of the corporation has made for a "shiftability of investments" which is not possible under any of the personal forms of organization.

Stock contracts have sometimes contained a stipulation that a stockholder can sell his shares only with the consent of the corporation. This limitation has generally been held to be contrary to public policy. Courts tend, however, to uphold a bylaw giving the corporation a right to purchase, if it wishes, any stock offered for sale by its stockholders. Such bylaw may be inserted because of a fear by the corporation that information may, through the sale of stock, fall into the hands of competitors. Stockholders subject to double or extra liability, often the case with banks, felt they should have the right to insist that any new stockholders have financial resources adequate to meet their share of such liability.*

* Not all the characteristics of stock are of equal importance in all cases. Frequently the free transfer privilege is of little significance. Charles M. Schwab, for instance, said that the Carnegie Company, the successor of the old partnerships dominated by Mr. Carnegie was considered as essentially the same old organization. "We made the shares $1000 each in order that they might not be traded in, . . . and I think I can say that in the years of the existence of that company there was only one sale of stock of ten shares; it was practically a partnership continued." (Testimony of Charles M. Schwab, before the House Committee on the Judiciary, H.R. 11380, 11381, 15926, 19959, May 11, 1901, p. 449.)

In response to the query as to why the shrewd Mr. Carnegie formed the corporation out of the partnerships, Mr. Schwab replied that, though Mr. Carnegie had the controlling interest in all the firms, "it was found that this partnership had grown so large and the business was of such a varied character, there were so many companies to control and so many partnerships holding varied interests, that for the sake of harmony among our partners it was decided to put all in the control of one corporation, to be known as the Carnegie Company. One of the chief reasons for that was Mr. Carnegie's idea that a partner in the coke interest, for example, should not have a greater interest in coke than he had in steel, as it might affect the contracts between the two parties . . . so he put all these interests into one company, so that each partner's interest was as a whole." (*Ibid.*, p. 449.)

Most closely held corporations, of course, are not interested directly in the free transferability feature.

The transfer of a stock certificate is usually made on a form contained on the back of the certificate which probably reads as follows:

> For value received hereby sell, assign and transfer unto
>
> ....
>
> ....
>
> (Please print or typewrite name and address of assignee)
>
> . shares
>
> of the capital stock represented by the within certificate and do hereby irrevocably constitute and appoint
>
> Attorney to transfer the said stock on the books of the within named company, with full power of substitution in the premises.
>
> Dated Signed
>
> In presence of

If this form is signed by the seller without the naming of an agent to transfer the stock and without the designation of a specific purchaser to whom the stock is to be transferred, the certificate becomes bearer in effect. This is known as an indorsement in blank. When this is the case the corporation can naturally make no change in the record of its stockholders. The certificate may remain thus indorsed for a long time, especially when the company is not paying dividends or when there is no particular reason for the purchaser to have the stock recorded in his name. With such blank indorsement, the stock can pass easily from hand to hand.

When dividends are being paid, or if the purchaser thinks he will hold his stock for a long time, the usual procedure is for such transferee to request his broker to turn the certificate over to the corporation so that a new one may be issued in his name. This request, when obeyed by the corporation or by its transfer agent, makes the new purchaser a stockholder of record and eligible to vote and to receive dividends. Before the corporation issues a new certificate, it may require the guarantee of the selling stockholder's signature. Generally this guarantee is given by the firm which acted as broker for the seller or retiring stockholder.

Since the canceling of old and the issuance of new certificates have become a tremendous task in the case of widely held corporations, many companies maintain a separate transfer agent, usu-

ally a trust company, to carry on this function. The New York Stock Exchange and some of the other exchanges insist that all listed corporations maintain such transfer agents. The transfer agent, who does the work of canceling the old certificates and preparing the new, operates on behalf of the corporation. In addition, these securities exchanges require the appointment of a registrar. The duty of the registrar, who represents the stock exchange, is to make sure that the stock issued is authorized within the limits of the legal capitalization of the corporation. The New York Stock Exchange requires that both these officers be located in Manhattan. Both transfer agents and registrar independently sign the certificates. The rule requiring these separate offices arose as a result of abuses by some corporate officers who have been known to issue stock beyond the amounts authorized by the charter.

5. *The right to inspect the books and papers of the corporation.* We have seen that in a partnership each partner is both a principal and agent for the other members of the firm. Any partner, therefore, by virtue of his position has unlimited access to information concerning the partnership affairs. The stockholders of a corporation, on the other hand, do not act as agents for the corporation; nor are the officers of the corporation the agents of the stockholders. A stockholder, especially one in a widely held corporation, knows the identity of the other stockholders only by chance.

However, some courts early recognized the fact that stockholders are in an approximate sense the beneficiary holders of the corporate property and that the officers of the corporation can in an indirect and fictional way be said to be agents of the stockholders. Other courts considered the corporate books, though necessarily kept in a central place, as a form of common property of all the stockholders. The law also recognized that occasion might rise when stockholders would be justified in seeking certain information and in learning the identity of the other stockholders. The possession of this information would then permit these holders, if they wished, to act as a unit or in groups for their own protection, particularly if there was evidence of dishonesty or of illegal or *ultra vires* * acts by the directors and officers or by the corporation.

From considerations such as these developed the common-law doctrine that the stockholder has the right to inspect the books and papers of his corporation. This right was restricted only by the

* By an *ultra vires* act is meant a transaction of a corporation which is beyond the scope of its powers as expressed in the charter or implied by law.

requirements that the request be made at a proper time and place and that the motive be legitimate, such as the protection of the interests of the stockholder and of the corporation, and not mere whim, curiosity, or desire for ulterior gain. The right was generally held to apply to stock books and other books of record, such as the minutes of the directors' meetings. Various states also enacted special legislation on the subject. Some of these laws gave an unlimited right to inspect the books; others placed restrictions on the privilege.

Wall Street heaved a sigh of relief in June 1933 when the newspapers reported the death of Clarence Herbert Venner, the "bogy man" of large corporations. "Old Man" Venner had made a practice of buying a few shares of stock in a company and then demanding the right to inspect the books, often under an unlimited statutory right where the motive could not be considered. If he unearthed any skeletons in the corporate closet, he immediately threatened suit. If the corporation officials bought out his shares at a high price, he triumphantly withdrew to new pastures. If they refused to yield to him, he let loose a flood of literature and propaganda which brought shivers to the management. Courts called Venner an "artificer of litigation." Psychologists might have classified him as having tendencies toward "litigious paranoia." But he was successful. Many corporations capitulated to his demands. The law reports are full of cases in which Venner or his organization, the Continental Securities Company, was plaintiff. He has been called the "only man who ever made money playing a lone hand against the wizards of high finance." * His arch enemy August Belmont estimated that "Old Man" Venner collected from $1,000,000 to $2,000,000 from James J. Hill's Great Northern Railroad.† As a result of Venner's "accomplishments," some of our states amended their statutes so as to prohibit the acquiring of information for ulterior purposes and to prevent a stockholder from using his right to inspect as a way of developing a nuisance value.

6. *The right to interfere in the management under certain extreme and unusual circumstances.* If a corporation is injured by the acts of an outsider, the company itself must naturally be the one to attempt to redress the wrong. Likewise, if an injury is done or is threatened to the corporation by *ultra vires* acts, the corporation must be the one to attempt to stop the abuse. If the company's welfare is threatened by fraudulent and self-interested actions by

* *The New York Times,* June 26, 1933.

† *Time* Magazine, July 3, 1933.

the management or by illegal and oppressive measures of the majority stockholders, the corporation is theoretically the one injured and must be the one to apply for relief. As we have said so often in these pages, the corporation and the stockholders are legally separate and distinct. The aggrieved stockholders cannot bring a suit at law to remedy the situation.

But what if the corporation wrongfully fails to bring suit or does not attempt to stop the damage? What if the majority stockholders, dominating the directors, override the protests of the minority and are determined to carry through the illegal action? Here the "King's conscience," or equity, has softened the law. If the aggrieved stockholders have made all reasonable efforts to get the corporation to bring a lawsuit or to force the management or stockholders to stop their abuse, they may bring a suit in equity. This is technically called a representative or derivative suit, since the cause of the action really belongs to the corporation. Any damages collected above the costs of the suit would go into the corporation treasury, for the benefit of all the stockholders. If the protesting holders lose their suit, they will have to pay the costs themselves. And so stockholders hesitate to bring derivative suits.

The nature of a typical suit of this kind is indicated by these passages in the head notes and the opinion of the Court of Appeals of New York in *Continental Securities Co. et al.* v. *Belmont et al.* (1912) 206 N.Y. 7; 99 N.E. 138:

> Action by the Continental Securities Co. and Clarence H. Venner, stockholders in the Interborough Rapid Transit Company on behalf of themselves and other stockholders similarly situated and on behalf of the company against August Belmont and others, impleaded with the Interborough Rapid Transit Company . . . an action to require said individual defendants to account to said company for fifteen thousand shares of its capital stock alleged to have been issued fraudulently and illegally and without any valid or adequate consideration therefor, but upon an alleged consideration that was a pretense and subterfuge and intended to cover a gift or bonus to defendants Belmont (and others). . .

It will be noted that the action was on behalf of the Interborough Company and also named it as a defendant. Any net damages collected would go into the company treasury. And one of the plaintiffs was "Old Man" Venner!

Summary. Corporations engaged in business must have an owner and must, therefore, have capital stock outstanding. They may also

issue bonds. The essential difference between stocks and bonds lies in the fact that stocks represent a proprietary and equity interest while bonds are a creditor or legal interest. The capital stock of a corporation is divided into shares, each of which carries with it certain rights and powers.

In considering the position of the stockholders it is important to remember that as stockholders they cannot act as agents for the corporation; nor can they directly interfere with the corporation in the conducting of its normal processes. They do, however, have important rights and powers. With few exceptions they may vote at stockholders' meetings and on certain unusual matters. They also have the right to receive any dividends lawfully declared by the directors. The holder of voting stock carrying a share in residual earnings generally has a common-law right to preserve his position in the company, but such pre-emptive right has frequently been avoided. In many instances the statutory law either eliminates it or permits the charter to restrict its application and use.

Since transferability of shares is a distinguishing characteristic of the impersonal type of business organization such as the corporation, a stockholder may dispose of his holdings freely and at will. Though a stockholder has no power to act for the corporation, he may inspect its books and papers, the extent and exact nature of this right ranging from an unlimited privilege to one qualified by reasonableness of motive under the common law. Finally, a stockholder may interfere in the corporation's affairs by a derivative or representative suit in cases where harm may come to the company through fraudulent or *ultra vires* acts by, or negligence on the part of, the management. To bring such suit, however, the aggrieved stockholder must show that he has exhausted all legal steps to get the corporation to prevent the damage and to force the management to amend its ways.

[Problems for this chapter and for Chapter 5 will be found on pages 75-77.]

Chapter 5

Preferred Stock

Special uses of preferred stock. Until almost the middle of the nineteenth century most corporations had outstanding only one kind of stock—common stock or, as the English call it, ordinary stock. By the year 1840, however, another kind of stock—the preferred (though it was not known at first by that name)—had appeared on the financial horizon. It is believed * that the first issues of preferred stock in the United States came in 1836, when the state of Maryland agreed to advance money for construction purposes to certain internal improvement companies. In 1837 this state purchased stock from the Annapolis & Elk Ridge Railroad Company which "guaranteed" a prior 6 percent dividend. This dividend was to begin twelve months after the completion of the contemplated project and was to continue until the income of the company was sufficient to enable it to pay that same percentage on all its outstanding stock. When this condition was met, the special stock held by the state of Maryland was to lose its priority.

Another phase in the early development of the preferred stock came in the 1840's, when railroads began to sell such prior stock in order to obtain funds which could not be raised from investors under the customary terms. The companies promised to pay "interest" out of earnings for a specified time on these new subscriptions. Thus, some companies had both "old" and "new" stock outstanding. Dividends could not be paid on the old until the "interest"—actually dividends—had been paid on the new. Accordingly, there was "Housatonic stock" and "Housatonic new stock," † "Erie old stock" and "Erie new stock." Since the "new stock" was not provided

* The data in this and the next paragraph are taken from George H. Evans, Jr., "Early History of Preferred Stock," *American Economic Review*, Vol. 19, (March 1929), pp. 43-58.

† The Housatonic Railroad had been authorized in 1843 by Connecticut to sell "new stock" with a preference of 3.5 percent dividends out of earnings.

for in the charters of that early day, permission to issue it had to be obtained through a special act of the legislature.

The "new stock" was intended to be a temporary expedient. But financiers learn quickly, and soon developed new uses for the preferred stock. Why not reduce interest charges by forcing or inducing weak bondholders of bankrupt and financially embarrassed railroads to accept preferred stock in place of their bonds? This idea emerged shortly after 1850 * and by the turn of the century the use of preferred stock for this purpose had become a common device in corporation finance.

Another outlet for preferred stock was much in evidence during the high finance of the 1920's. Promoters and company managements realized that the issuance of preferred stock would give a company additional funds without subjecting it to the risk of fixed interest payments. At the same time, if the new preferred had no vote and was made nonparticipating, the old common stockholders retained their control of the company and their undiluted right to the residual share in the earnings. Moreover, if a company could earn a higher rate on its total investment than that which it had to pay to the preferred stock, the residual common would be that much "to the good." Thus, preferred stock became a favorite device for trading on the equity.†

Characteristics of preferred stock. Preferred stock, or "stock with a preference" as some call it, is capital stock. It is similar to ordinary or common stock in all respects except where the law or the charter or the contract make it different. Simply designating a stock as "preferred" does not adequately describe its characteristics. It is necessary to indicate in what respects it is preferred.

Let us assume that a company has outstanding 500 shares of preferred stock of a par value of $100 per share and 1000 shares of common stock, also of a par value of $100. The contract and charter state that the preferred stock has a preference as to dividends to the amount of 6 percent annually. Nothing else is said. The contract and the charter, as well as the law and usage, are silent as to other characteristics or privileges of the preferred stock. Exactly what are the rights of its holders?

* K. T. Healy in *The Economics of Transportation in America*, Ronald Press, 1940, p. 296, gives 1858 as the date when preferred stock was first used in reorganization to reduce fixed or interest charges.

† For a detailed analysis of trading on the equity, see Chapter 9.

1. *Does this specific stock have preference as to assets in the event the company is dissolved or liquidated?* It is important to remember the principle that preferred stock is ordinary stock except in those respects in which it is made different. Common stock, of course, has no priority as to assets, but it does represent a residual claim. Since the preferred stock in our illustration is not made different in this respect, it has no priority as to assets, but it does have a right pro rata, share for share, with the common stock to share in the assets after all legal claims have been paid. Thus, since there are 500 shares of preferred stock and 1000 shares of common stock, or a total of 1500 shares, each share of preferred stock represents a claim to $1/1500$ of any assets available for distribution after the payment of all legal debts and obligations.

As a matter of fact, most charters or preferred-stock contracts provide specifically that the preferred stock has a priority as to assets. A frequent provision is that in the event of involuntary liquidation the preferred holders are to have a prior claim to par value plus dividends, or if the stock is no par, to some arbitrary stated figure, such as $100 plus dividends. If the liquidation is voluntary, they have a prior claim to an amount slightly above par, such as $105 or $110, which generally corresponds to the call price of the stock.*

2. *Does this preferred stock have the participating privilege?* Let us assume that the net earnings of this company after the payment of all expenses, costs, interest, and taxes, are $15,000. Since the contract provides that, if any dividends are distributed, the preferred stock is to get 6 percent, the preferred dividends will be $3000. This leaves a balance of $12,000. If the directors see fit to distribute the balance of $12,000, should they give it to the common stock exclusively, or would the preferred stock have a right to extra dividends above the 6 percent stipulated in the agreement?

This question, also, can be answered on the basis of the principle already referred to: preferred stock is like stock except in those respects in which it is made different. As we have seen, stock represents a residual claim. The contract says that the dividend rate shall be 6 percent. No limit is found in the contract or charter on the

* Corporations usually insert in their bond and preferred stock contracts a provision that they may "call" these securities—that is, pay them off—at a stipulated price and after giving the required notice. This price is referred to as the "call price." See Chapter 6 for further discussion of the call feature.

dividend rights of the preferred stock. Consequently, the preferred stock has, in this respect, the same rights as the common stock. The answer to our question then is that the preferred stock has a right, share for share with the common, to any distributed dividends after the common stock has received its 6 percent. Thus, the preferred stock is first given $6 per share, or a total of $3000. Then, when each share of common stock has been given $6, which amounts to $6000 on the 1000 shares, the balance of $6000, if the directors decide to distribute it, must be paid equally, share for share, to both classes of stock. Since there are 1500 shares, this would be $4 extra per share. If the directors decide to distribute, say, only $1500 of the balance, retaining $4500 as surplus, the extra dividend for the preferred as well as the common, would be $1 per share.

If, on the other hand, the contract or the charter had said "6 percent and no more" or "6 percent and 6 percent only," or had used other limiting language, the preferred stock would have a claim to that amount only. If, however, no such words of limitation are included, the preferred stock would have the right of unlimited participation.* Generally preferred stock is specifically made nonparticipating.

The 7-percent cumulative participating preferred stock of the former Westinghouse Electric & Manufacturing Company was one of the best-known illustrations of the unlimited participating type. This stock had a par of $50 and carried a $3.50 dividend rate. It shared equally with the common stock after the common had been paid its $3.50. Some companies permit their preferred shares to participate even before the common has received the full dividend rate assigned to the preferred. Virginia-Carolina Chemical preferred, for instance, carries a dividend rate of 6 percent on a par of $100, but

* The weight of opinion among the American courts seems to favor the theory that the rate of preferred dividend is restricted to a maximum of that stipulated, even if the contract contains no limiting language. The courts favoring this view argue that the words "preferred stock" carry "to the ear of the ordinary investor no promise of participation in earnings beyond the preferred dividends" and that the law should follow this common understanding on the part of the businessman. The author has in the text outlined the minority view, however, in the belief that it is the sounder of the two. At any rate, if a corporation wishes to limit the dividend on its preferred stock to that mentioned in the contract, it should do so in plain language, in as much as in this controversial subject a court is likely to swing either way. See 18 *Corpus Juris Secundum,* par. 229, and H. W. Ballantine, *Ballantine on Corporations,* Callaghan and Company, 1946 ed., p. 506.

the unlimited participation by the preferred begins after the common has received $3 per share.

Even when preferred stock is participating, there are limits placed upon the amount of the extra dividends. A common practice is to give the preferred an additional dividend not in excess of a certain maximum, such as 50¢ in the case of Poor and Company (claim A), after which the balance is to be considered earned by the common stock. The 4-percent cumulative participating preferred stock of Eastern Bakeries, Ltd., participates with the common stock up to $1.50 per share. Three percent on the par value has been a common figure for the amount of limited participation.

Other limits on participation may involve the use of some kind of sliding scale. The Budd Wheel cumulative participating preferred had a regular dividend rate of $7 per $100 share. If the net operating revenues were between $600,000 and $800,000, the rate on the preferred became $8, if between $800,000 and $1,000,000, $9 per share, and whenever the net was above $1,000,000 the preferred dividend rate was $10 per share. Metropolitan Ice 7-percent cumulative participating sinking fund preferred receives in addition to its regular 7 percent, 20 percent of the amount paid on each share of common stock.*

3. *Does this specific preferred stock have voting rights?* The charter and the contract in our illustration, it will be remembered, are silent on this matter. Since one of the basic rights of stock is the right to vote, and since preferred stock has all the characteristics of stock, except those in respect to which it is stated to be different, it follows that our preferred stock carries the vote. Some state laws provide, however, that preferred stock has no vote unless specifically given to it by charter or bylaws. This type of statute, of course, modifies the general common-law rule.

4. *Is the stock cumulative or noncumulative?* The general rule seems to be that if there is no provision in the contracts in regard to this matter, the preferred stock is cumulative.† After all, common stock would share in any withheld earnings later distributed. So why should not a preferred stock silent on this matter be treated the same as ordinary stock? It has been pointed out, however, that, if

* Illustrations taken from various editions of *Moody's Manual of Investments* (Industrial). Each issue of this *Manual* contains in the Special Feature Section a list of participating preferred stocks.

† See 67 A.L.R. 773 and *Hazel Atlas Glass Company* v. *Van Dyk and Reeves*, 8 Fed. (2d) 716 (1925, CCA 2d), writ of certiorari denied in *Van Dyk* v. *Young*, (1925), 269 U. S. 570.

by a fair construction of the entire contract the preferred dividends seem to be made dependent upon the profits of each specific year, they are not cumulative. But if, as is the usual situation, the contract is interpreted to provide that the preferred shares are to be entitled to dividends of a certain amount if earned and declared, regardless of the year when earned, the stock would probably be held to be cumulative, even though the contract or charter is silent in this regard.*

The history of the preferred stock furnishes an additional reason for the conclusion that if nothing is implied to the contrary, preferred stock is cumulative. Very early these peculiar securities were considered by some courts as a kind of debt. The "interest" would, of course, then legally be considered cumulative. The courts after a little vacillation and uncertainty soon put the new preferred stock in its proper place as a stock, but the old reasoning seems to have been carried through to contribute to the building up of the view that dividends on preferred stock are cumulative unless provision is made to the contrary.†

Since most preferred stock is specifically made cumulative, it becomes necessary to consider exactly what is meant by such provision. In general this means that, if the dividend is passed or is paid only in part, the deficiency, including the dividend rate for the current period, or perhaps for the entire current year, must be completely made up before the company may lawfully pay dividends on any junior stock. Assume that a preferred stock carries a dividend rate of $7 per share, payable $1.75 per quarter, and that this has for some time been declared regularly. Then, assume that during one bad year the directors pay a dividend of only $3, the next year $1, while during the third year the directors "take no action," "no action" meaning "no dividends." During the fourth year fortune again smiles on the company, and the directors consider the idea of resuming dividends. Before they can legally distribute anything to the common stock, they must first pay $24 to each share of preferred stock, that is $4 arrears for the first year, $6 for the second, $7 for the third, and the full $7 for the fourth year.

There is some question as to whether preferred dividends for the entire current year would have to be paid or only up to and including the current quarter. The situation would depend upon the exact

* See 18 *Corpus Juris Secundum*, par. 229 (c).

† See George H. Evans, Jr., in "Early History of Preferred Stock," *American Economic Review*, Vol. 19 (March 1929), p. 56.

wording of the contract. There would seem to be a difference between the expression (a) "entitled to cumulative dividends of 6 percent annually, payable quarterly," and (b) "entitled to quarterly dividends of 1.5 percent."

It requires little mathematical computation or financial imagination to appreciate the fact that it might become extremely difficult for a company to pay off arrears of ten or fifteen years. In the face of such large unpaid dividends, the common stockholders might despair of receiving any further distributions during their lifetime. Extraordinary measures are often taken to wipe these arrears off the slate in order to open the way for the early resumption of dividends on the common stock. But more about that later in Chapter 20.

Special problems with noncumulative preferred. Let us suppose now, instead, that the preferred stock is noncumulative, as is the case with a number of railroad issues.* Must the directors pay up the arrears on the preferred before they may declare dividends on the common? The answer seems easy: if the dividends on the preferred stock have not been paid in the past, the fact that they are noncumulative leads to the conclusion that the directors do not have to pay the past dividends on the preferred before they restore dividends on the common. According to this principle, the directors would have to pay only the dividend on the preferred for the current year or perhaps only for the current dividend period, before they can pay on the common stock.

But the problem is more complicated than that. Assume, for instance, that the company had earned substantial net income during one or more of the three years when dividends on the preferred had been passed or not paid in full, but that the board of directors had decided to retain the earnings in order to conserve cash or to finance a legitimate expansion? If in paying dividends in the fourth year, the directors could skip the omitted or unpaid dividends on the preferred up to that year, would not such act really constitute an enrichment of the common stockholders at the expense of the preferred? Should not such dividends which had been earned but not distributed, be earmarked, so to speak, even in favor of preferred stock which is specifically stated to be noncumulative?

This has been, and remains today, a highly controversial problem. Many law writers, backed by important judicial opinions, have answered these questions in the affirmative—that is, they have ar-

* There are very few noncumulative preferred stocks outside the railroad field.

gued that when dividends were earned in part or in full on the noncumulative preferred stock, but had not been paid, the noncumulative preferred holders have a prior claim to such earned but unpaid back dividends.

The Wabash case. In 1930, however, the Supreme Court of the United States in the case of *Wabash Railway Company* v. *Barclay,* 280 U. S. 197, 203-04, took a contrary view. The Wabash had earned money in a number of years during which it had not paid dividends to the noncumulative preferred stock (designated as Class A stock) which, incidentally, held the control of the corporation. The company then wished to resume dividends on its stock, not only the current on the A, but also on the B preferred and on the common, without making up the dividends on the noncumulative preferred A which had been omitted. The plaintiff in the lower courts, Barclay, and other holders of this noncumulative preferred A stock, insisted that, to the extent that these dividends had been earned in the preceding years but not paid, they should be considered as cumulative and should be paid before dividends were declared on the common stock.

Justice Holmes, speaking for the court, said in denying the claim of Barclay:

We believe that it has been the common understanding of lawyers and businessmen that in the case of noncumulative stock entitled only to a dividend if declared out of annual profits, if those profits are justifiably applied by the directors to capital improvements and no dividend is declared within the year, the claim for that year is gone and cannot be asserted at a later date. But recently doubts have been raised that seem to have affected the minds of the majority below. [The majority of the United States Circuit Court of Appeals had ruled in favor of Barclay.] We suppose the ground for the doubts is the probability that the directors will be tempted to abuse their power, in the usual case of a corporation controlled by the holders of the common stock. Their interest would lead them to apply earnings to improvement of the capital rather than to make avoidable payments of dividends which they do not share. But whether the remedies available in case of such a breach of duty are adequate or not, and apart from the fact that the control of the Wabash seems to have been in Class A, the class to which the plaintiffs belong, the law as remarked by the dissenting judge below, "has long advised them that their rights depend upon the judgment of men subject to just that possible bias."

When a man buys stock instead of bonds he takes a greater risk in the business. No one suggests that he has a right to dividends if there are no net earnings. But the investment presupposes that the business is to go on, and therefore, even if there are net earnings, the holder of stock, pre-

ferred as well as common, is entitled to have a dividend declared only out of such part of them as can be applied to dividends consistently with a wise administration of a going concern. When, as was the case here, the dividends in each fiscal year were declared to be noncumulative and no net income could be so applied within the fiscal year referred to in the certificate, the right for that year was gone. If the right is extended further upon some conception of policy, it is enlarged beyond the meaning of the contract and the common and reasonable understanding of men.*

Safeguarding provisions. Preferred stock is fundamentally stock with all its liabilities and risks. In return for its priority and for other privileges, it is often deprived of some of the rights basically belonging to stock. If a preferred stock is nonvoting and nonparticipating, for instance, its holders would have little chance of protecting themselves against excessive stock issues or excessive dividends. Moreover, such stock generally does not carry the pre-emptive right. With certain rights taken away, preferred stock, in turn, may be safeguarded by "protective provisions." In addition to the cumulative feature, the preferred stock contracts often contain "safeguards" which

1. Protect against the issuance of too much additional stock of the same kind;
2. Protect against the issuance of too many securities ranking ahead of the preferred stock;
3. Protect against the thinning out of the equity behind the preferred by the payment of too many dividends on the common stock;
4. Provide for the possible thickening of the amount of equity behind the preferred stock; and
5. Give preferred stockholders special powers if dividends are not paid or if other protective provisions are not heeded.

A brief summary of the pertinent provisions of the General Mills, Inc., 3⅜ percent cumulative convertible preferred stock will illustrate some of these safeguarding provisions.† The company may

* It is important to bear in mind that the Wabash noncumulative preferred stock contract gave the directors full discretion as to the payment of dividends, regardless of whether there were any available earnings. If the contract had provided that dividends were to be paid to the extent that there were earnings but that if no earnings were available the dividends were to be noncumulative, the decision would probably have been different. See Ballantine, *op. cit.*, pp. 518-23.

† Appendix C contains a detailed account of the 3.65 percent cumulative preferred stock of H. J. Heinz Company and a table showing the characteristics of registered preferred stocks of various industry groups.

issue additional shares of this stock only if (*a*) the net current assets are equal to at least 60 percent of the total preferred outstanding after the new issue, and (*b*) the net earnings after all expenses and charges during at least two of the last three years have been equal to 200 percent of the total preferred dividends including those on the new issue. The company agrees not to place any mortgage upon its assets or to issue any prior or equal-claim preferred stock except with the consent of a majority of the preferred. The company is not to pay cash dividends on its common stock unless after such payment the net current assets are equal to 60 percent of the preferred stock. Finally, though the preferred ordinarily carries no voting right, it has the power to elect a majority of the board if the preferred dividend or the sinking fund is in default for one year.* On an older issue the company was required to set aside a sinking fund sufficient to purchase annually 1 percent of the preferred stock outstanding. We shall see later in Chapter 20 that these safeguarding provisions are not always effective.

Summary. In considering the rights and liabilities of preferred stockholders it is important to remember that preferred stock is stock. Preferred stock is the same as ordinary stock and has all its rights and powers and disabilities except in those respects in which the contract or the law or the charter makes it different. Accordingly, where nothing is said to the contrary, preferred stock has the vote, is participating in the residual profits (courts strongly disagree on this, the minority view being advanced here), is cumulative (there are some exceptions also), and shares pro rata with the common stock (but has no priority) in the assets of the corporation in the event of its dissolution. The essential characteristic of preferred stock is priority as to any dividends lawfully declared by the board of directors.

Since preferred stock is deprived of at least some of the privileges usually belonging to stock, it is customary to insert in the contract certain "protective provisions." These usually give special voting rights in case dividends are not regularly paid or grant certain powers to prevent the issuance of additional preferred stock or prior claim securities unless specified conditions are met.

An interesting and vexing question is that of the status of noncumulative preferred stock when dividends have been earned but are not declared. Many law treatises and some court cases are authority

* This skeleton description is adopted from *Moody's Manual of Investments, Industrials,* 1947.

for the conclusion that where dividends are earned in part or in full on the noncumulative preferred stock but are not distributed by the directors, the noncumulative preferred stock has a prior claim to such earned, but unpaid, back dividends. However, the Supreme Court of the United States held in the Wabash case that dividends not declared on noncumulative preferred stock even when earnings were adequate to pay them were gone forever, provided the directors in withholding the dividends acted sincerely and honestly for what they considered the long-run welfare of the corporation.

PROBLEMS

Chapters 4 and 5

1. A Pennsylvania statute of 1828 provided that the incorporators might turn in coal land and other property to their corporations. These would then "form a common stock and be divided into a convenient number of shares." (*Harvard Law Review*, Vol. 43 (1930), p. 609.) Does this meaning of the term "common stock" seem more accurate than the sense of inferiority in which the words seem to be often used today?

2. According to Henry S. Drinker (*Harvard Law Review*, Vol. 43 (1930) at p. 590), the earliest case enunciating the doctrine of pre-emptive right was that of *William Gray* v. *The President, Directors and Company of the Portland Bank* (1807), 3 Mass. 363. The company involved in this litigation had just changed from a partnership to a corporation, the old partners becoming stockholders. The court held that "natural justice requires that the majority should not have authority to exclude the minority."

   a. In a large, modern, widely held corporation with numerous kinds of securities outstanding, including preferred stocks and bonds, do you think the principle of the pre-emptive right is
      (1) as necessary as in the Portland case;
      (2) as easy to apply?

   b. From the above brief account of the Portland Bank case would you say the principle of the pre-emptive right is of common law or statutory origin?

   c. Consult the statutes of your state to see whether the legislature has passed any law in regard to the pre-emptive right. (The Prentice-Hall Corporation Service, Vol. 1, gives a digest of the corporation laws of all our states.

3. A stockholder's derivative suit is not a much-used device, because, if the stockholder loses, he pays his own expenses and if he wins "his victory is a victory for the corporation and only indirectly one for himself." (E. M. Dodd in *Harvard Law Review,* Vol. 54, p. 925.)

a. When may a stockholder bring a derivative suit?
b. How does the fact implied in this statement really increase the power and prerogative of the directors of a corporation?

4. As reported in a news item of September 2, 1947:

> Directors of Stokely-VanCamp, Inc., have declared a quarterly dividend of 25 cents a share on the 5-percent cumulative preference stock and a dividend of 25 cents a share on the common stock, both payable Jan. 1, 1948, to stockholders of record Oct. 31.

The preferred stock is callable at $21 and is nonparticipating. It has no vote regularly but, on the nonpayment of preferred dividends of $1 per share, the holders have the right to elect a majority of the directors.

a. Referring to the table "Characteristics of Registered Preferred Stocks . . ." in Appendix C compare this stock with the general characteristics of that kind of security. Also consult Appendix C for the characteristics of H. J. Heinz cumulative preferred stock.
b. Of what importance is the term "stockholders of record"?
c. From the news item can you figure out the par value of the preferred stock?

5. If the contract, charter, and bylaws, and the law of the state are silent on the matter, does preferred stock carry the vote? Is it participating? Cumulative? Does it carry a prior claim to assets in the event of dissolution? Does nonvoting, nonparticipating preferred stock have the pre-emptive right?

6. Find two illustrations of the recent issuance and sale of preferred stocks, noting particularly the protective provisions and the rights of the holders as to dividends and vote. Compare with the 3.65-percent cumulative preferred stock of H. J. Heinz and the "Characteristics of Registered Preferred Stocks" found in Appendix C. (To

locate such illustrations, consult Moody's "Advance Sheets," preferably the industrial, public utilities, and railroad sections; the news section of *Standard Corporation Records,* the General Corporation and Investment News sections of the *Commercial and Financial Chronicle, The Wall Street Journal,* or your daily newspaper.)

7. The reluctance of courts to compel the distribution of dividends may result in great damage and hardship to minorities in jurisdictions which follow the rule of the Wabash Case.

   a. Why are courts reluctant to compel the distribution of dividends? Is an action to compel a payment of dividends a lawsuit or an equity suit?
   b. Why is the reluctance of the court to compel dividends likely to be more of a hardship on noncumulative preferred stock than on common stock?

Chapter 6

Bonds or Funded Debt

BORROWING constitutes the second general method of raising long-term funds from outside sources. The corporation may borrow with the ordinary promissory note or it may issue and sell formal, sealed instruments which have their basis in what is popularly called the "corporate indenture." These formal promises to pay are known as bonds, though, when issued for a short term such as three or five years, they are frequently referred to as "notes."

Bonds may be broadly classified into two general groups:

1. Those that are secured by the pledge of specific assets. This group includes mainly mortgage bonds, collateral trust bonds, equipment trust obligations.
2. Those that are secured only by the general credit of the issuing corporation. This class includes chiefly what are known as debenture bonds.*

SECURED BONDS

Corporations at first raised most of their funds by stock issues. But shortly after 1800—we do not know exactly when the movement began—American corporations started to raise large amounts of money through the issue of mortgage bonds. This development came partly at least in response to a demand for greater security by Europeans who invested in American enterprises. At first there was some doubt as to whether corporations could legally mortgage their property without the permission of the stockholders, but today, in the absence of a prohibition by charter or by statute, a corporation which has the implied power to borrow money also has the incidental capacity to expedite and to strengthen such loans by executing a

* For characteristics of numerous bond issues, see Appendix D. See Appendix D also for various provisions in the Atchison, Topeka and Santa Fe Railway Company General Mortgage of 1895.

mortgage on its property. Bonds secured by a mortgage are known as *secured bonds.*

Nature of the mortgage. In a discussion of secured bonds it is necessary to analyze the nature and legal significance of the mortgage.

When a farmer or householder borrows money, he signs at least one instrument—the promissory note. By this document he promises to repay the principal amount at a specified time and in the meantime also a designated amount of interest at regular intervals. This is known as an unsecured note—or we may call it a debenture note. The unsecured note rests on the general credit and the earnings of the debtor. The holder of such note has no priority over other claims. There is no specific or segregated asset to which he may look. The unsecured note is a "general credit obligation."

The person advancing the money may, however, want a prior claim. He may demand that some specific asset be designated as security. To provide this priority and greater certainty of repayment of principal, the borrower may be required to execute a mortgage. This mortgage is generally on land, but may also be based on other property. An unsecured note represents a right only against the debtor personally, with recourse ultimately, with other creditors, against the debtor's property, but a note backed by a mortgage gives the creditors certain specific, direct, and exclusive rights *in rem,* as the lawyers would put it. By such right *in rem* is meant immediate recourse against the specific things mortgaged, that is generally against the land, if the debtor defaults on principal, interest, or fails to meet some other important condition.

In the ordinary mortgage loan the creditor has possession of both the promissory note and the mortgage. The note represents and is the evidence of the indebtedness. It can be enforced separately from the mortgage. The debtor who executes the mortgage is known as the mortgagor, the creditor is the mortgagee.

In the early stages of the law of mortgages the debtor or mortgagor transferred both the title and the possession of the land to the creditor or mortgagee. Any revenues or rents from the land went to the mortgagee, who was not required to apply them to reducing the debt. This early practice helps to explain the derivation of the word mortgage. The land, that is, the pledge, was dead as far as any value to the mortgagor was concerned. This was then called *mortuum vadium* or dead pledge. The French words for the equivalent con-

cepts give us mort and gage, from which we get the word "mortgage."

Slowly the procedure changed so as to allow the mortgagor to remain in possession of the land. We do not know exactly when the final breach with the ancient custom was made, but even as late as the middle of the seventeenth century the practice of the mortgagor giving up possession to the mortgagee was still common.*

Under the terms of the early common-law mortgage, the debtor or mortgagor transferred to the mortgagee a defeasible title. Then under a proviso known as the defeasance clause, the debtor could defeat this passing of the title and restore it to himself, if he paid the debt according to the specified terms. But if the debtor did not pay strictly according to the terms and conditions on the "law day" (due date), the land which had been pledged became the absolute property of the creditor, and any right which the debtor may have had to defeat the complete passing of the title to the creditor was then absolutely and forever lost.

But what if the failure to pay was due to some trivial or temporary cause beyond the control of the mortgagor? Even so, the law said, the mortgagor could not recover the title. The law provided that if the privilege of defeating the passage of the title had not been exercised by the payment of the debt on or before the law day, the title vested absolutely in the mortgagee.

Equity of redemption. For a long time this was considered the correct law. But the chancellor or "keeper of the King's conscience" disliked such extreme penalties, and through a long process of evolution the chancellor's courts or courts of chancery (equity) developed the concept called the equity of redemption. According to this principle, which became accepted about 1700, the mortgagor continued to have a right to redeem his title for a time even after the legal day for defeating the title had passed and after the land had been forfeited at law for nonpayment.†

The equity courts reasoned that the absolute forfeiture of the debtor's right to defeat the passing of the title merely because of a failure to meet payments on a specified day was too severe and rigorous. This is really a penalty—drastic and unreasonable. Equity abhors penalties. The intention of the parties after all was merely

* Theodore F. T. Plucknett, *A Concise History of the Common Law*, Lawyers Cooperative Publishing Co., 1936, p. 544.

† R. W. Turner, *The Equity of Redemption*, Cambridge University Press, 1931, pp. XI, XII.

to pledge the property for the loan and then upon its repayment to have the title revert to the mortgagor. The purpose was normally not to have the title continue in the mortgagee. Equity courts developed the concept of equity of redemption to prevent hardship.

Therefore, said equity, the mortgagee must let the mortgagor exercise his right to defeat the title even after the breach of the conditions. This privilege of regaining the title even after the breach of the contract is technically known as the equity of redemption. If the mortgagor does not now meet the conditions upon the passing of a reasonable time, the mortgagee will have the privilege of applying to the equity court for foreclosure, that is, for final cutting off or barring of this equity of redemption.

The privilege to the mortgagor of defeating the title by paying the debt according to the contract is sometimes called the equity of redemption. It is probably more accurate, however, to call this the right of redemption. Equity does not enter in until after default in the contract. The privilege of redeeming after such default is an equitable remedy and this right is properly called the equity of redemption.

The title and the lien theories. The principle that the title to the land is transferred to the mortgagee at the time of the executing of the mortgage, subject to the proviso that the passage is to be defeated by the meeting of the conditions of the note, is known as the "title theory," or the "common law theory." By the wording of a mortgage agreement used in a state following this procedure, the mortgagor grants, bargains, sells, assigns, releases, and conveys (or a combination of such words) to the mortgagee and to his successors and assigns forever the designated real estate, subject to a defeasance clause.

A large number of American states, on the other hand, have adopted what is called the "lien theory." According to this, the mortgage simply states that the debtor "mortgages" the specified property to the creditor. Both the possession and the title remain in the mortgagor until default occurs. The mortgagee then exercises his lien if the debtor defaults. This theory recognizes a mortgage for what it really is—a lien or legal claim on certain property for purposes of security. An advantage of the lien theory is that it clearly recognizes the right of the mortgagor to sell the mortgaged property. Such sale is possible, of course, under the title theory, but only through a bit of legal subterfuge. The sale of mortgaged property,

it must be pointed out, technically involves only the transfer of any value existing over and above the amount of the mortgage.

Indenture and indenture trustee. The promissory note and the mortgage are two separate instruments. The basic one is the note, which furnishes evidence of the debt and the amount due. Accordingly, in the usual foreclosure and sale, if the sale brings in more than the amount of the note, the balance after costs must be turned over to the holder of the next mortgage in line, if any, or to the mortgagor against whom the action was primarily brought. If the sale nets less than the amount of the indebtedness, the debtor is, as a general rule, still liable on the note. He can be personally held for any deficiency. As to such deficiency the debt is unsecured and the creditor must take his place with other claimants. Sometimes exceptions are specifically made to this rule. The federal government agencies, for instance, often lend to a farmer on the sole security of certain crops. Let us say, a loan of 90¢ per bushel is made on corn. If the price of corn goes below 90¢, the government simply takes the corn and has no right to seek a deficiency judgment against the farmer.

As already suggested, where a farm or a residence or a small place of business constitutes the security, the creditor generally holds both the note and the mortgage. This is possible because the total debt usually represents an amount which some individual or family or bank can easily advance. If there is default on the note, the holder brings his own action on the mortgage.

When a large corporation borrows money, however, the situation may be far different. A corporation note may, of course, be in terms of thousands, but it may also run into millions or even hundreds of millions of dollars. It is difficult, if not impossible, to find a single investor willing to advance millions to one individual debtor. It may be necessary to split the corporation's note into numerous notes or bonds of convenient and popular denominations.

The corporate note is only a short document. The bond which the investor buys occupies only one sheet. But the full contract of the debtor corporation requires more space. There are other obligations besides that to pay interest and principal. Perhaps there are restrictive provisions. Perhaps there is provision for a sinking fund. Stipulation must be made as to who is to pay taxes and make repairs. Numerous working details as to the relations between the debtor and the creditor must be put down on paper. Furthermore, explicit details

as to the form of the bond and the technique of paying interest and principal must be included in the agreement.

It would be possible to issue a promissory note and a copy of all these supplementary contracts, including one of the mortgage, if there is one, to each person furnishing funds. This would have disadvantages, however, from the point of view of both the corporation and the investor. The investor would have a bulky document. The simplest corporate mortgage may run fifty pages—many are 100 or 200 pages—it is awkward to handle, is generally hard to understand and is expensive to record.* It would be almost impossible for the investor to bring an effective suit alone, and it would be difficult to get the other creditors to join with him in a legal action. The corporation might find itself harassed by numerous suits in many courts.

Out of the needs represented by such situations have developed an instrument known as the trust indenture and an institution or official called the indenture trustee. The trust indenture is an elaborate document which contains the full agreement by the debtor corporation, including the mortgage, if any, and all details in regard to the form of the bonds and the responsibilities of the parties. The note and this indenture agreement are turned over to an indenture trustee, who holds it in trust "for the equal and proportionate benefit of any and all [bonds] issued hereunder." †

The corporate note is thus, in effect, divided into many smaller units, of one sheet each, called bonds, which are sold to those investors who care to buy them. Each bond states on its face that it has been issued under the terms of a specified mortgage and indenture. The bond is both signed by the appropriate corporation officials and authenticated by the trustee. By such authentication the

* A mortgage for $10,038,000 made by the Northern Indiana Power Company to the First National Bank of Chicago and Harold Eckert as trustee and recorded with the county recorder of Putnam County, Indiana, required a mortgage recording fee of $96.60. The recording charge is $1 for the first 600 words and 10¢ for each additional 100 words. This mortgage included 223 pages of printed matter. At about the same time a mortgage of the Indiana Associated Telephone Company was recorded in the same courthouse, the fee being $70.00. These are typical illustrations.

† Quotation from general mortgage of 1895 of the Atchison, Topeka and Santa Fe Railway Company. When the title to certain property is turned over to a trustee, who is to hold it for the benefit of creditors, to become theirs in the event a certain debt is not paid, the transaction is often called a deed of trust. Such deed of trust is for practical purposes considered the same as a mortgage. Extracts from the Atchison, Topeka and Santa Fe general mortgage are given in Appendix D.

trustee guarantees that the bond is genuine, was properly issued, and is one of the bonds authorized or covered by the mortgage and indenture.

The trust indenture not only gives the terms of the mortgage and the nature of the security but it also sets forth the obligation of the corporation as to such things as the making of repairs, the payment of taxes, the establishment of a sinking fund. It also describes the duties of the trustee. If the corporation fails to make payment of interest or principal or if it defaults in carrying out other specified requirements, the trustee, though he was probably appointed by the corporation or by the bankers who underwrote and sold the issue of bonds, is in theory supposed to act on behalf of and for the protection of the holders of the bonds.

Work and position of the indenture trustee. The work of the trustee is generally of a three-fold nature: (1) as just indicated, he authenticates each bond. (2) He acts for the bondholders in seeing that their rights are carried out. In theory if a substantial number of bondholders appear to have a just claim that the debtor corporation is not following the provisions of the contract, the trustee must study the validity of such complaints and, if necessary, use pressure against the corporation. (3) If the corporation defaults on principal or interest on the bonds or fails to carry out some other important provision, such as that requiring the setting up of a sinking fund, the trustee must, if the complaining bondholders assure him reimbursement for his expenses, bring suit to remedy the default or he must start appropriate proceedings to foreclose on the mortgage, if that is necessary.

Since widely separated bondholders, who are probably legal strangers to one another, cannot expediently bring action on their own account, it is the duty of the trustee to represent them in a collective capacity. The trustee is a sort of conductor between the corporation and the bondholders. Interest payments or installments on the principal are channeled through him, by way of a fiscal agent, into the hands of the bondholders. Grievances of the bondholders are funneled through the trustee to the corporation. The trustee is the nominal and legal mortgagee. The bondholders are the beneficiary mortgagees.

There are thus really three parties to the trust indenture agreement: the corporation, the bondholders, and the trustee. The trustee theoretically has duties both to the corporation debtor and to the

bondholders, but, as we shall see later, with little actual responsibility to either one.*

The early practice was to have only natural persons act as trustee.† But this had disadvantages. A natural person might die before the note matured or was paid, which would raise complicated problems of succession. Furthermore, an individual probably possessed limited facilities and did not have the varieties of skill necessary to carry out the functions successfully.

It then became the practice to have an incorporated trust company or bank act as the trustee. This probably supplied a more capable management and a greater reservoir of assets. It certainly increased the continuity and permanence. But the corporation also has limitations, particularly in the scope of its power and in its restricted mobility from state to state. In a number of instances there are two trustees—a corporation trust company or bank for continuity and permanence, and a natural individual, who should obviously be a citizen, for mobility and a greater freedom of action. In such case the banking company becomes known as the corporate trustee and the natural person as the individual trustee. The most common practice is still the use of one trustee—a trust company, which is known as the corporate trustee or simply as the trustee under the indenture.‡

Name of bond and nature of mortgage. A mortgage usually is thought of as representing a prior claim or a senior lien. This is not always the case, however. In fact, a mortgage may occupy a "junior" position, by which we mean that it may be a second or a third mortgage or have a position even subsequent to that. When prior mortgage

* See Chapter 21 for a discussion of the failure of the trustee to carry out his nominal duties.

† In some of the earlier mortgages an officer of the debtor corporation, such as the president, acted as the trustee.

‡ That the individual trustee is becoming more or less obsolete is illustrated by the following statement in the indenture of the Northern Indiana Power Company Mortgage. "Said Harold Eckert [The individual trustee] has been joined as individual trustee in order to comply with any legal requirements respecting trustees under deeds of trust of property . . . such trustee shall . . . possess such powers, and such powers only, as may be necessary to comply with such requirements. If by reason of the repeal of such requirements it shall not be necessary that one of the trustees hereunder be an individual the company shall file with the trustee—that is, the corporate trustee—a written request for the removal of the individual trustee. . . ."

In indentures if the word "trustee" is used alone, it generally means the corporate trustee. The individual trustee, whenever he is referred to, is called "individual trustee."

bonds mature or are called, second- or third-mortgage bonds may actually become a first mortgage. In other words, the backing may be different than that indicated by the name of the bond. Mergers and consolidations may also be instrumental in changing the position of bonds. This may now be illustrated.

Company *X* has outstanding first-mortgage bonds due in 1950 and second-mortgage bonds due in 1960. Company *Y* has outstanding first-mortgage bonds maturing in 1950 and second-mortgage bonds to be repaid in 1965. Company *Z* has no bonds outstanding. Let us assume that these companies are merged into The *XYZ* Corporation. All the mortgages and bonds remain in force, the mortgages continuing on the respective properties, but the merging corporation has assumed the debts. The bonds on the liability side of the balance sheet of The *XYZ* Corporation will now appear as follows:

First-mortgage bonds on the real property turned in by *X*, due 1950
Second-mortgage bonds on the real property turned in by *X*, due 1960
First-mortgage bonds on the real property turned in by *Y*, due 1950
Second-mortgage bonds on the real property turned in by *Y*, due 1965

All these bonds have been assumed by The *XYZ* Corporation.

The *XYZ* Corporation now issues new bonds due in 1985, secured by a mortgage on all real estate of the Corporation. This mortgage is a third mortgage on the property which had been turned in by *X*, a third mortgage on the property originally owned by *Y*, and a first mortgage on any real property turned over to the consolidated company by *Z*. This new issue is both a third-mortgage and a first-mortgage bond. It might be described briefly as a "consolidated- and first-mortgage bond," the word "consolidated" showing that it is secured by the consolidated properties or was issued by a company which resulted from the consolidation, and the "first" indicating that it is secured by a first mortgage on part of the property, that is, on the real estate turned in by *Z* and perhaps on any other unencumbered real property owned by The *XYZ* Corporation. The designation "general-mortgage bond" might also be used to describe these new bonds.

If, now, The *XYZ* Corporation decides to call, or if at maturity it pays off, the first-mortgage bonds which it had assumed and which had followed through on the real estate turned in by *X* and by *Y*, the second-mortgage bonds will in effect become the first mortgage. If, later, the corporation pays off these second-mortgage bonds, the general-mortgage bonds (or consolidated- and first-mortgage bonds)

will really become first-mortgage bonds, though they would probably still be referred to in the financial news and on the exchanges as the "*XYZ* general-mortgage bonds."

Collateral trust bonds. Other assets of a corporation besides real estate may serve as security for bonds. A holding company, for instance, will often issue collateral * trust bonds which are backed by the securities issued by the subsidiaries, mainly stock, which it owns. The issuing company, however, does not have to be a holding company nor is the collateral necessarily in the form of stocks of subsidiaries. The collateral may be any eligible securities owned by the issuer. Though the collateral trust bond is a perfectly legitimate and respectable form of security, it has sometimes been used by financiers in connection with the holding company as an instrument to increase and multiply their control.†

Equipment-trust certificate. The equipment trust certificate is still another form of secured note. A railroad company wants a locomotive of certain specifications. If it does not have the necessary cash to pay in full for such equipment, it will make arrangements for credit. These are made with some bank or trust company, which is to act as trustee. The railroad company then places its order with the locomotive manufacturer, making appropriate down payment of probably 20 percent. When the locomotive is completed, the manufacturer delivers possession to the railroad company, but the title goes to the trustee. Thus, the possession and the title are split. A name plate is placed on the locomotive giving the name of the owner trustee. The trustee has in the meantime arranged for the leasing of the locomotive to the railroad company. The railroad company promises to pay semiannual "rentals," such rentals to be sufficiently large to include a specified fraction of the unpaid price of the locomotive as well as the amount of the interest. It is, indeed, the intention of the parties that after the arranged "rentals" have been paid, the title to the locomotive shall pass to the railroad company.

The lease contract is in effect divided into certificates due serially at semiannual intervals. These are sold to investors as equipment

* "Collateral" in this usage means stocks, bonds, notes, or even accounts receivable, often referred to as "choses in action," which are placed in trust to back up a specific promise to pay. Generally the items making up this collateral are in a form, or are so indorsed, as to make them easily and quickly salable, with the minimum of legal formality, in the event of default on the promise to pay. The collateral is generally left with a trustee. Bonds issued on the basis of such collateral are called "collateral trust bonds."

† For further discussion of the holding company, see Chapter 29.

trust certificates. The receipts from such sale, together with the down payment made by the railroad, are planned so as to permit payment in full to the manufacturing company and to cover all commissions and expenses. Then, from time to time as the railroad company pays the semiannual "rental," the trustee uses the money to pay interest and to cancel a portion of the equipment trust certificates. If the lease runs for fifteen years, one thirtieth of the certificate will be canceled at the end of each six-month period. Equipment trust certificates issued under this lease system are known as "Philadelphia plan car trust certificates."

The equipment trust certificate of the type just described generally occupies a very strong position from the investment point of view. In the first place, in the event of financial difficulties for the railroad, the retention of the title by the trustee gives the holders of the equipment trust certificates a peculiarly strategic position. If the certificate holders are not "treated right," the trustee can simply take the equipment. In the second place the term of the lease is generally shorter than the life of the asset. Since the lease arrangement is rarely for more than fifteen years and since most equipment lasts for a longer period than that, the excess of the net value after depreciation of the locomotive over the remaining outstanding bonds increases steadily each half year until the maturity of the final series of notes or certificates. For example, assume the cost of the rolling stock to be $6,000,000 and the down payment 20 percent. This leaves $4,800,000 balance to be financed by certificates. If these mature in thirty semiannual installments of $160,000 each, the following sample figures will result: At the beginning, ratio of equipment value ($6,000,000) to total certificates ($4,800,000) is 5 to 4. At end of the tenth year (twentieth period), if we assume the life of the equipment to be twenty years with no scrap value, the depreciated value will be $3,000,000 and the outstanding certificates $1,600,000, giving a ratio of equipment value to total certificates of 15 to 8.

Sometimes the equipment security takes a form known as the "New York equipment obligation." In this case the conditional sale is used instead of the lease. The conditional sale amounts to a contract to sell, under the terms of which possession of the article is passed immediately to the conditional buyer but title remains with the seller for the purpose of security until all the payments have been made.

The New York plan is comparatively little used for various reasons. One difficulty is the fact that though the full legal title under

the conditional sale remains with the trustee or the vendor, the railroad company does get a semblance of title. Such semblance may cause misunderstanding and can form the basis of an action by the general corporate creditors. They can argue, without solid legal foundation undoubtedly but with enough plausibility to make themselves a real threat, that they have at least an apparent lien on the equipment. Under the lease, or Philadelphia plan, it will be remembered, the railroad company does not even have the semblance of a title.

Another obstacle to the use of the conditional sale has been the difficulty of complying with the conditional-sale registration laws. If the buyer of an article under a conditional bill of sale moves the property from one county to another, he should notify the conditional vendor. If the vendor wants to protect himself against the sale of the article to an innocent third person, he may be required by the law to record the conditional sales agreement with a specified office of record in such new jurisdiction. Under such statutes, if the seller fails to do this, he is not protected in case the conditional buyer sells or mortgages the property to an innocent third person. Such registration or recording requirement in the case of much railway equipment may become burdensome. For reasons such as these the New York equipment obligation, based upon the conditional sale, is not common. The more important form is the Philadelphia plan car trust certificate based upon the lease.

UNSECURED BONDS OR BONDS SECURED ONLY BY THE GENERAL CREDIT OF THE ISSUER

A large number of bonds are backed by no specific collateral whatever but are based completely on the general credit of the issuer. These are called *debenture bonds* (from the Latin debeo, debentis = owe). All of the bonds issued by the United States government and almost all those issued by our state and local governments are of this nature. So-called "revenue bonds" based on the receipts from some municipally owned public utility have some characteristics of secured bonds. Nearly all foreign government bonds are debentures, though some countries have issued bonds backed by a specific source of government income, such as the customs receipts, or by the revenues from a fiscal monopoly, such as matches.

Protective provisions for debenture bonds. Among private business corporations debenture bonds are not as numerous as bonds based on security of some sort, but they are fairly common. Sometimes the

borrowing company's business is of such a nature that it has no suitable real property to pledge. Sometimes the credit of a company may be so bad or its assets may already be so fully pledged that it has no available security with which to back a new bond issue. Chances are such a company cannot borrow at all, but if it does, it will probably have to do so through the sale of debenture bonds at a very low price, that is at a very high cost or yield. On the other hand, some companies possess such a high credit standing that they can borrow additional money at a very low cost without pledging any specific property at all, though they have plenty of it available. It is sometimes said that the issuance of a debenture bond by a private corporation is an admission of weakness or a sign of strength.

Holders of even strong debenture bonds may often find themselves in a hazardous position. The management is often tempted to place a mortgage, if none already exists, ahead of the debenture bonds or to add to the quantity of mortgage bonds already outstanding. The corporation might even want to issue additional debenture bonds. To prevent the management from exploiting the debenture holders, the contract often includes so-called "protective provisions," the most frequent of which provides that, if the corporation subsequently issues a mortgage bond, the debenture holders must be secured ratably with the new mortgage. This is another way of saying that the debenture bonds would then also become mortgage bonds. A fairly common restriction provides, in effect, that if additional bonds are issued, whether prior to or in the same class as the debentures, the total interest bill, including that on the proposed issue, must be covered by at least, say, twice the amount of available income. Another provides that the total bonds, including those proposed, must not exceed one third of the value of the fixed assets of the company. There may also be special restrictions on the payments of dividends on the stock.

THE AFTER-ACQUIRED PROPERTY CLAUSE AND THE CALL FEATURE

A mortgage is generally based on the real property of the corporation. What happens if the debtor or mortgagor acquires additional real estate after the mortgage has been placed? Does the old mortgage cover this after-acquired property?

Many mortgage agreements do contain an "after-acquired property clause." According to this provision, the mortgage is to cover not only the asset designated in the contract but it is automatically

to include any property subsequently acquired, particularly real estate, franchises, and leases. This clause is inserted for the direct, primary benefit of the investor. If it permits the issuing corporation to sell its bonds at a higher price (or lower cost or yield) than would be possible in the absence of such provision, the company will also benefit, at least for the time being.*

The after-acquired property clause may be a boomerang both to the investor and to the corporation. It may seriously hinder further financing by the corporation, particularly if the mortgage is closed-end. Under a closed-end mortgage, after the company has disposed of the bond issue currently authorized, it is prohibited from issuing any further bonds having the same lien or mortgage claim. Since the holders of the outstanding closed-end bonds would not normally permit the corporation to issue new bonds with a prior lien, and since the closed-end provision excludes the authorization of additional bonds having the same lien, and since the after-acquired clause automatically brings any newly acquired real estate under the existing mortgage, it follows that the combination of the after-acquired property clause and the closed-end mortgage would constitute a deadly strait jacket upon further financing by even a healthy and prosperous corporation.

The immediate answer to this may seem to be: do not insert the after-acquired property clause in the contract. But the problem is not as simple as that. Many corporate mortgages already in existence do contain this provision. The closed-end mortgage is also in fairly wide use. Faced by such a situation, corporations have devised several ways of avoiding or evading these provisions. These methods may be classified under two heads: (1) the direct and forthright methods; (2) the indirect or subterfuge methods. We will consider the indirect methods first.

* The common law at first frowned upon the after-acquired property clause. When the debtor or mortgagor inserts the after-acquired clause, he in effect promises to execute additional defeasible conveyances whenever he acquires new property. But there is only one agreement, namely the conveyance at the time of the signing of the mortgage. If there is only one conveyance, how can there be several conveyances? Furthermore, how can a man dispose of something which he does not own or which may not even be in existence?

One answer to this riddle is furnished by the principle or maxim of equity to the effect that "that which ought to be done is done." Thus, when the mortgagor becomes the owner of new real property, he is considered to be under a duty to transfer it to the mortgagee. Equity will then consider this as being done because it ought to be done. See David Cohen and Albert Gerber, "The After-acquired Property Clause," *University of Pennsylvania Law Review,* Vol. 87 (April 1939), pp. 636-38.

Indirect methods. First, there is the *purchase-money mortgage.* This involves placing a mortgage on the property before it is acquired or during the process of purchase. If Corporation *X* wishes to buy a $25,000 piece of land, it might settle for it by paying $10,000 cash and by giving a mortgage to the seller for $15,000 as security for the payment of the unpaid balance. Thus the land when acquired already has a mortgage on it. Really the company buys only the equity over and above the mortgage. The after-acquired property clause in the company's original mortgage, of course, will immediately fasten onto this equity in the new property. The purchase-money mortgage is a very common device.

Then, there is *the use of the subsidiary.* A corporation whose financial style is cramped by the after-acquired property clause in its bond contract may organize a subsidiary company to purchase new property. This subsidiary can then place a separate and independent mortgage on such assets. The corporation which organized the new company becomes the owner of its stock. This stock is not real estate and, therefore, cannot be brought under the usual after-acquired property clause. This device is fairly common. It is generally considered to be a legitimate use of the concept of the corporate entity.

Still another device is *the merger.* A debtor corporation bound by the after-acquired property clause may merge with or into another company by an appropriate vote of the stockholders, which act in effect forms a new corporation. The old company loses its separate entity and existence. This method can be used only through a careful heeding of the requirements as found in the consolidation statutes. The resulting corporation may now purchase additional property without its being considered as acquired by the old corporation. Thus, any additional land obtained by the new company cannot be regarded as coming under the provisions of the old mortgage. The old mortgage follows its pledged real property into the new company. The new corporation naturally assumes the old mortgage.

Still another method is the *lease.* A company leases a building or other piece of property from its owner, paying enough in periodic installments to cover the rental and the appropriate part of the purchase price over a number of years. When such schedule of payments has been completed, the title to the building, probably by now greatly depreciated, will pass to the company and will become subject to the after-acquired property clause of any mortgage

outstanding. The equipment trust certificate, which we have already discussed, is generally based on a lease. Though the desire to evade the after-acquired property clause is probably at times the purpose of the Philadelphia plan, there are other stronger reasons for its use.

Forthright methods. The two best-known devices under this heading are *reliance upon short-term bonds* and *the use of the call provision.* Bonds may be given such a short term as to cause them to fall due before there is need for other financing or before substantial amounts of real property will be acquired. This method has several obvious disadvantages. Even the best forecasters may be unable to plan accurately for the future. Funds may be needed for such a comparatively long time that short-term arrangements may not adequately serve the corporate purpose. A company issuing short-term bonds may have to pay them off when it should use its funds to acquire extra plant or add to its current assets rather than to cancel obligations. The borrowing of funds anew at that time may be expensive.

Wise corporate managements will include the *call privilege* in the bond contract. By the call feature is meant the right of the debtor to pay off the bonds before maturity under certain conditions at a stipulated price. The call privilege can be exercised only on an adequate pre-arranged notice, often thirty or sixty days. The bonds to be called are selected by a lottery or drawing unless the company decides to redeem the entire issue at one single time. The most frequent call prices are 105 and 110, though the call price may be at par (or conceivably below par) or (rarely) even as high as 120 or above. The figure 105 is often used because it permits the investor who has his money thrown back at him to wait a year or so to place his funds advantageously elsewhere without loss of interest. The amount above 100 may be said to constitute a sort of "dismissal wage." The call price may be on a sliding scale from a higher figure, say 110, at the beginning of the term, to a par or a point very close to it as the maturity date draws near.

The call method involves some of the same disadvantages as does the use of short-term bonds. Since the company may feel the desire or need to call before the funds originally borrowed have been fully utilized, it may not have adequate funds for the purpose. Furthermore, if the desire is to release the company fully from the tyranny of the after-acquired property clause, it will be necessary to call the entire issue.

The short-term bond method and the call feature have another weakness in common. The company must have begun operations with the short-term bonds or it must have included the call feature in its bond contract. If there is no provision for the calling of long-term bonds, the company may be forced to use one of the indirect or subterfuge methods. Theoretically the company might be able to buy up the entire issue on the market, but the knowledge that the company was taking this step in the case of noncallable bonds would certainly drive their price to prohibitive levels.*

Reasons for insertion of call feature. It is important here to analyze the important reasons for the insertion of the call feature in both bond and preferred-stock contracts. These reasons are:

1. *To permit the company to get rid of a security contract containing provisions that may some day limit the freedom of the company in its financial policies.* The elimination of a mortgage bond protected by the after-acquired property clause, which we have just discussed, is an illustration of this purpose of the call feature.

2. *To permit the company later to simplify its capital structure.*† Many corporations have done their financing piecemeal over a period of time in a haphazard manner. Their capital structures, resulting from original financing, as well as from mergers and combinations, may have "just grown." A corporation developing through various steps or processes of growth might have eight or ten or, in the case of many railroads and public utilities, even twelve or fifteen different kinds of securities outstanding. ‡ The call feature would permit the company to substitute perhaps as few as two or three securities for a heterogeneous group of stocks and bonds with

* It is possible virtually to "call the uncallable" by the use of the merger device. A Pennsylvania law, for example, provides that if the required majority of the stockholders vote to have their corporation merge with another, any dissenters will be limited to the appraised cash value of their stock. This opens the way for a change in the rights and characteristics of the securities of the merged company. See *Business Week,* Nov. 23, 1946, p. 86, for the proposal in this way to change the dividend rate on the noncallable participating preferred stock of the Westinghouse Electric Corporation from 7 percent to 3.5 percent.

† The term "capital structure" refers to the proportion of the long-time funds raised by a corporation by means of bonds compared with those raised by means of stocks. For a further discussion and analysis of the capital structure of corporations, see Chapter 9.

‡ These are normal and commonplace illustrations. Getting into the unusual, we note that the Missouri Pacific Railroad had seventy-two different classes of securities outstanding as it entered its reorganization. See E. M. Dodd, "The Modern Corporation, Private Property, and Recent Federal Legislation," *Harvard Law Review,* Vol. 54, 1941, pp. 917-48, at p. 940.

diverse, even conflicting, rights and privileges. Such simplification is frequently of value both to the corporation and to the investor.

3. *To permit the company to take advantage of reduced costs of financing.* Costs of raising money or of borrowing may have fallen since the floating of a certain bond or preferred-stock issue, mainly because of improved conditions of the company or because of more favorable conditions in the money market. The lowering of current interest rates will tend to cause the yield on sound bonds and on high-class preferred stocks also to fall. If the company in question issued bonds or preferred stock during unfavorable times when the general interest rates were high, the insertion of the call feature will permit it to take advantage of the lowered rates by calling the bonds or preferred stock. The company may induce the old holders to accept new issues bearing a lower rate of interest or dividend in return for their old holdings, or it may obtain cash by selling new securities with a lower coupon rate and then use this cash to "dismiss" the old security owners. The difference between the par value and the call price constitutes the "thanks" of the corporation. This possibility of saving in interest or preferred dividends is by far the most important reason for including the call provision in the contract. Corporations have called numerous bonds and preferred shares in order to make such savings in the costs of capital.*

4. *To enable the corporation to eliminate certain securities whose holders may have attempted to develop a "nuisance value."* A small group of bondholders has sometimes held up a merger or a consolidation or has attempted to obstruct reorganization or recapitalization proceedings in the hope that the company will "buy them off." Sometimes, of course, these holders may be right, sometimes wrong in their opposition to the contemplated plans. Whether they are right or wrong, the company has often sought to get rid of them by the use of the call privilege.

Unusual uses of the call feature. The call feature has occasionally given rise to unexpected and spectacular events. When Mr. Harriman and the Union Pacific in the early part of this century attempted to control the Northern Pacific, they relied on the fact that they held a majority of this company's total or combined preferred and common stock, both of which had the vote. Though the Harriman group held a comfortable majority of the preferred stock, they lacked

* The company may also use the call feature to get rid of securities possessing special privileges such as the right of conversion into common stock. For convertible bonds, see Chapter 11.

almost 40,000 shares of controlling a majority of the common stock. This situation "bothered" Mr. Harriman considerably, for he knew that the preferred stock was callable and he feared that the directors would retire these shares, thus ousting his group from the majority control. Under these circumstances the opposing groups fought for the control of the Northern Pacific common stock in one of the fiercest battles in the history of Wall Street.*

The presence of the call feature tends to put a ceiling on the market price of the securities concerned. A 7-percent preferred stock, for instance, issued by a sound corporation could easily sell at $150 in a period of low interest rates, if it were not callable. If, on the other hand, such stock were callable at, say, 105, it is to be doubted if the market price would go much beyond 115 or 120. Very few people would dare or care to pay $115 for this stock, in the fear that it might be called very soon at 105.†

Summary. Though corporations at first raised most of their funds through stock issues, sometime after 1800 they began to issue mortgage bonds in increasing quantities. Bonds may be classified broadly into two groups: (1) those that are secured by designated assets; (2) those that are backed only by the general credit of the issuing corporation. In both cases there is a promissory note, but in the former the holder of the bonds is given certain rights *in rem* against specific property—generally real estate and equipment—which may be exercised in the event the debtor does not live up to his obligations. In the case of a mortgage loan, the mortgagor—that is, the debtor—retains the full possession and use of the mortgaged property. This has not always been true, however, for the word "mortgage" (dead pledge) originated in the olden days when the creditor also received both possession and control of the property.

Though in the typical personal mortgage, the creditor holds both the note and the mortgage, this is not generally practicable in the case of the typical corporate mortgage. This situation early stimulated the development of the trust indenture and the indenture trustee. The indenture trustee holds both the note and the indenture agreements, including the mortgage, if any. The note, in effect, is split up into numerous separate documents called bonds. The

* See John K. Winkler, *Morgan the Magnificent*, Vanguard Press, 1930, Ch. XI on "The Battle of the Giants."

† The noncallable preferred stock of the United States Steel Corporation, considered a reasonably high-grade investment, has sold consistently in the last few years in the neighborhood of $150 or $160. This stock would undoubtedly have been called long ago had the contract contained the call privilege.

trustee retains the indenture and mortgage and is supposed under the theory of the law to see to it that the terms of these agreements are performed by the debtor. The trustee authenticates the bonds and generally acts as an intermediary between the debtor corporation and the holders of the bonds. Though we generally think of a bond as backed by a first mortgage, there may be many degrees of priority. Frequently a second- or third-mortgage bond becomes in effect a first-mortgage bond if the prior claims are paid.

A common form of secured bond is the equipment trust obligation. This is frequently issued under the lease system or the Philadelphia plan. Under this system the title to the equipment remains in a trustee, but the railroad company obtains the possession and full use of it. The railroad debtor makes annual or semi-annual "rental" payments, which in fact include both interest and a specified part of the purchase price. The debt is thus steadily being paid off or amortized, and the equity behind the outstanding debt gradually thickens. If the railroad company defaults on any of its payments, the trustee may reclaim the equipment. These circumstances—the steadily increasing equity and the right of the trustee to resume the possession—help to make equipment obligations a very strong type of security from the point of view of the investor.

Unsecured or debenture bonds are issued by the federal, state, county, and city governments and by companies which do not own large quantities of fixed assets. In some cases a company's credit may be so good that it can borrow without giving a mortgage; in other cases its credit may be so bad and its available assets already so completely mortgaged that it can borrow in no other way.

A bond issue carrying the after-acquired property provision should certainly be made callable. Though the chief purpose of the call feature is to permit the debtor company to take advantage of possible future reduced costs of financing, there are other important reasons for including this privilege to the company. The call feature has been used to permit the company to simplify its capital structure, to eliminate certain securities whose holders attempt to develop a "nuisance value," and to get rid of burdensome restrictions in old security contracts.

PROBLEMS

1. Refer to the Atchison, Topeka and Santa Fe Railway Company General Mortgage 4 percent Bonds, Due 1995, in Appendix D.

a. Why did the company grant title to the Trustee?
b. Does this mortgage contain the after-acquired property clause?
c. As far as you can tell, are the bonds callable? (If there is no provision for call, they are noncallable.)
d. What is the purport of the *habendum* clause?
e. What are the essential ideas in the trust clause and the defeasance clause?
f. Do mortgages drawn up in states holding the lien theory of the mortgage, as opposed to the common-law or title theory, contain the granting, the *habendum,* and the defeasance clauses?
g. In the lists of bonds, these bonds are often described as Atchison, Topeka and Sante Fe General Mortgage 4's, 1995. Many of the bonds that were protected by liens prior to that of the "general 4s" have matured or have been called. What was the effect on the "general 4s" of such payment?
h. What are the essential differences between a coupon and a registered bond? What combination of the two is possible? Note carefully the wording of the form of the coupon bond. How might the price of the fully registered bond differ from that of the coupon bond?
i. Does this bond contain the gold clause? Were there any circumstances in 1895 that motivated the insertion of the gold clause? Is such clause enforceable today?

2. Find five current illustrations of the recent issuance and sale of bonds. Note the details as to callability, trustee, interest rates, the nature of the backing or security, if any, and the protective provisions. Also compare with the "Characteristics of Registered Bond Issues" as found in Appendix D. Consult the sources mentioned in problem 6 of Chapters 4-5.

3. The Pennsylvania Railroad Company in January 1947 awarded on the basis of competitive bidding the issue and sale of $14,970,000 of 1⅞ percent equipment-trust certificates (Philadelphia Plan) to a syndicate composed of Halsey, Stuart and Company, Inc., and associates. The yield would range from 1 percent to 2.15 percent, according to maturity. The cost of the equipment covered is at least $18,712,000.

The certificates are dated February 1, 1947, and are to mature in annual installments on each February 1 from and including 1948 to 1962.

a. What is meant by the Philadelphia Plan?

b. Assume that the life of the equipment is twenty-five years, that the scrap value is 10 percent of the total cost, and that the depreciation is to be computed by a straight-line method, what will be the equity behind the outstanding certificates on February 2, 1949? On February 2, 1960? Is the equity "thickening" or "thinning"? (See footnote page 125 of Chapter 8 for description of the straight-line method of computing depreciation. Note in your discussion that these certificates mature on an annual basis rather than on a semiannual basis as discussed in the text.)

c. Will this certificate be listed on a stock exchange?

d. What would you say as to the quality of this security as compared with the other bonds of the Pennsylvania Railroad?

4. Corporations have sometimes organized subsidiaries as a method of avoiding the operation of the after-acquired property clause. Explain how this can accomplish the purpose. In what other ways have companies avoided the after-acquired property clause?

Chapter 7

Par Value

In connection with securities we always come upon three kinds of value: par value, book value, and market value. Par value is the figure assigned to a security at the time of its issue. Book value is the value of the assets behind a security, particularly a share of common stock, according to the books or accounts of the corporation. Market value is the price which the stock or the bond commands on the market.*

These three concepts will be referred to frequently in the chapters which follow, but here we will confine ourselves to the first—par value. Though reference will at times be made to bonds, our emphasis will be mainly on stocks.

As already stated, the par value of a share of stock is the figure assigned to it at the time of issue and printed on the stock certificate. Though the common par value of earlier corporations was $100, today it is frequently set as low as $1 and sometimes is found in terms of cents.

Par value of stock an artificial concept. A share of stock represents simply an "aliquot part" of the capital stock of a corporation. From the economic and business point of view, the par value as such has little significance. It has no direct relation to earnings per share and the market price of the stock. It does not even have any logical relation to the book value. The par value does not represent a promise by the corporation to repay that amount. Par value is an artificial and more or less arbitrary figure.

To illustrate some of these principles, assume the figures for Companies *A*, *B*, and *C* as given on the next page.

The table on page 102 presents the results of the following calculations: The interest on the bonds and the dividends on the preferred stock are deducted from the net income to give the residual

* The term "book value" has several usages. See Appendix A.

BALANCE SHEET OF COMPANY *A*

(Profit and loss statement shows net income of $2000 before the payment of interest on bonds.)

Assets	$20,000	Bonds, 4%	$ 2,000
		Preferred stock, 6%, 20 shares, par $100	2,000
		Common stock, 100 shares, par $100	10,000
		Surplus	6,000

BALANCE SHEET OF COMPANY *B*

(Profit and loss statement shows $5000 net income before the payment of interest on bonds.)

Assets	$50,000	Bonds, 4%	$ 2,000
		Preferred stock, 6%, 20 shares, par $100	2,000
		Common stock, 1,000 shares, par $1	1,000
		Surplus	45,000

BALANCE SHEET OF COMPANY *C*

(Profit and loss statement shows net income of $600 before payment of interest on bonds.)

Assets	$44,000	Bonds, 4%	$ 2,000
		Preferred stock, 6%, 20 shares, par $100	2,000
		Common stock, 200 shares, par $200	40,000

income available for the common stock. The dividing of this residual income by the number of shares of common stock gives the earnings per share of common stock. The book value per share of common stock is computed by dividing the equity available for the common stock (in our examples this is the sum of the total par value of the outstanding common stock and the surplus) by the number of common shares.

The theoretical price of the common stock is arrived at by capitalizing the earnings per share at 10 percent, which amounts to a multiplier of ten. Such multiplier, it must be noted, is not necessarily an accurate determinant of market values, but it is sometimes used as a method or tool for theoretical computation. Generally an average of the income over a period of years, rather than that for only one year, should be used. Because of the differing degrees of risk and market conditions, the actual multiplier will vary among various companies and industries, with the ups and downs of the business cycle, with the depths and crests of business hopes, with political conditions, and with numerous other circumstances.

Company	Number of shares of common stock	Par value of a share of common stock	Equity available for the common stock	Book value per share of common stock	Income available for common stock *	Earnings per share of common stock	Market price of common stock †
A......	100	$100	16,000	$160	$1,800	$18.00	$180
B.....	1,000	1	46,000	46	4,800	4.80	48
C......	200	200	2,000‡	10	400	2.00	20

* This is net income minus bond interest and preferred stock dividends.
† Earnings per share times ten.
‡ Figure of $2000 arrived at as follows: Net income of $600 capitalized at 10 percent equals $6000. This gives the probable actual value of the assets. All the rest of the value of the assets as listed on the books constitutes water. Since $2000 of bonds and $2000 of preferred stock precede the common, the equity of the common stock becomes only $2000.

Company *C* is treated in this special way because its net income cannot possibly support the value of the assets as given on its books. Therefore it seemed necessary to find a realistic value of its assets by a capitalization process. For further discussion of the capitalization of earnings or income, see Chapter 9 and Appendix A.

A comparison of these figures shows that it is not the par value of the common stock which is significant, but rather the total number of shares compared with the amount of the assets and earnings. The stock of *A* has a par value 100 times as great as that of *B* but only ½ that of *C*, but its theoretical market price is not even 4 times that of *B* and is 9 times that of *C*. The book value of a share

of *A* is 60 percent above its par value, while the book value of a share of *B* is 46 times its par value, while that of the watered *C* is only $\frac{1}{20}$ of the par figure.

In the case of bonds, on the other hand, par value does have significance in that it represents the amount which the company promises to repay at maturity. For the preferred shares, the par value does not represent any amount to be repaid, since preferred stock is not a promise to pay, but it sometimes does indicate the amount to be repaid, if available, in the event of liquidation. Actually, however, the liquidation figure may be set above, and theoretically even below, the par value. Incidentally, par value does provide the basis for applying the dividend rate: a 5-percent dividend rate on a $50-par share means a dividend rate of $2.50.

Par value and the law. Though the par value of a share of stock means little from the economic and business point of view, it does have great significance in law. When a corporation issues 100 shares of stock of a par value of $100, it, in effect, announces to the world that it has received this amount, in the form of cash or property or services, from the original purchaser of such stock. The certificate generally states that the stock is fully paid and nonassessable; that is, the corporation also tells the world that the stock has been fully paid for and that the corporation has no further claims against the stockholder.*

But, suppose that the subscribing or original stockholders had paid to the issuing corporation only $50 in cash, or goods and services reasonably worth only $50, in return for a $100 par value share of fully paid and nonassessable stock. In this situation three accounting procedures are possible. The company can list on the asset side only the $5000 value actually received and treat the $5000 discount as a subtraction from the $10,000 total par on the right-hand side. In such case the balance sheet would read:

ASSETS		LIABILITIES	
Total assets	$5,000	Common stock, 100 shares, par $100	$10,000
		Less discount of $50 per share	5,000
			$ 5,000

* The possible claims by the creditors are discussed later in this chapter.

A second common practice has been to write up, pump up, or water the value of the assets to $10,000 and to list the stock at the full par value. If the originally acquired assets consist of property, such as land and buildings, patent rights, machinery, shares of stock of other corporations, or organizational and promotional services, it would be possible immediately to mark their value up from $5000 to $10,000. If the stock were originally paid for by $5000 cash, the company could have bought with it other forms of property, listing the value of these as $10,000. The $10,000 asset accounts might be said to include a good-will item, which, of course, is not good will at all. It is ridiculous to consider a corporation as having good will when it is unable to sell its stock even at par. It is more accurate to say that the $10,000 assets include $5000 "worth" of "water," or "hot air," as Andrew Carnegie brusquely called it when he was asked if he would be willing to accept common stock of the United States Steel Corporation in exchange for the shares of his own company.

A third method is to include the $5000 discount under the assets as simply "discount." This possibly might be said to represent the opposite of a premium surplus, which results when stock is sold above par. Since by a sort of fiction a premium is in effect owed to the stockholder like any surplus, so a discount may, by a similar farfetched reasoning, be considered an asset representing something coming from the stockholder. But we have already seen that the stock has probably been issued fully paid and nonassessable, the management thus admitting that the stockholder owes nothing to the corporation. At the best, then, such discount, as an asset, is also "hot air." Corporations which do place a discount on stocks or bonds on their books as an asset generally write this off over a period of, say, five years, by charging one fifth of it against their income or surplus each year.

Holding companies frequently placed the stocks of subsidiaries on their books at a pumped-up or watered value, the increase being rationalized by the anticipation of higher earnings or of other advantages resulting from the fact of combination. The history of corporations, particularly in the public-utility field, during the 1920's abounds with illustrations of this practice.*

Assume now that shortly after its issuance of $10,000 par value of fully paid and nonassessable stock to the subscribers for $5000 in cash or for only $5000 worth of other property this company

* See Chapter 29.

has occasion to incur debts; say it sells bonds at par. Then, let us assume that financial reverses later hit the corporation and that it becomes insolvent in the bankruptcy sense, by which we mean that the company has inadequate assets at a fair valuation to pay off its debts. Under the common law as generally interpreted and under many specific state statutes the bondholders and other creditors may collect the unpaid balance from the originally subscribing stockholders or from any persons who bought such stock with notice that it was not paid in full. In our illustration the creditors could recover up to a maximum of $50 per share, if necessary, to meet their claims. The provision that the stock is fully paid and nonassessable is binding only on the corporation. It does not prevent the subsequent creditors from collecting the deficiency.

Theories of stockholders' contingent liability. The possible theories or grounds on which such recourses may be had by unpaid creditors against original stockholders or purchasers with notice are classified under four heads:

1. The implied promise.
2. The trust-fund doctrine.
3. Misrepresentation.
4. Specific statutory provision.

1. *The implied promise.* Some courts have argued that since the stock was actually not fully paid, there is an implied promise on the part of the stockholders to pay the balance if the creditors need it. It is difficult, however, to prove the existence of an implied contract when an express agreement covers the subject. The express contract says the stock is fully paid. The theory of implied promise is, therefore, illogical.

2. *The trust-fund doctrine.* Some courts, in early decisions rarely followed by even these courts themselves,* held that capital stock

* In the early case of *Wood* v. *Dummer,* 1824, 3 Mason 308, a federal court held that it was illegal for a corporation to distribute its capital stock among its stockholders without having made provision for the prior payment of its debts. Speaking through Justice Joseph Story, the court said that this could not be done because the capital stock was a "trust fund." Later opinions by the Supreme Court, as well as by lower courts, have modified or rejected the theory that capital stock is a "trust fund," though still logically holding that the capital stock is really a "fund" intended for the protection of the creditors and to insure the continued existence and operation of the corporation. The objection has been to the use of the word "trust." See also discussion of legality of dividends in Chapter 14. If a dividend is paid when the capital stock is impaired, or if the result of its payment is to impair the capital stock, such dividend is illegal.

represented by par value is a trust fund which may be relied on for the payment of corporate debts. The trust fund, according to this theory, can be used in full if necessary, even to the extent of collecting unpaid portions from stockholders. The trust-fund doctrine was prevalent in the United States during the nineteenth century, but is now generally discredited. The corporation owns its property with no strings attached and, subject to charter and protective provisions and restrictions, it may, while solvent, buy and sell such property as it sees fit. Capital stock, in the strict sense, cannot, therefore, be considered a trust fund.

3. *Misrepresentation.* A theory which seems to have considerable philosophical support is to the effect that the corporation was guilty of misrepresentation when it recorded the stock on its books at full value in spite of the fact that it received only a part of such value. By accepting such stock as fully paid when it was only partly paid, the stockholder also became a party to the misrepresentation. So long as things go well, this misrepresentation does no harm, but if the company becomes unable to pay its debts, the misrepresentation comes out of its latent state and is presumed to have worked an injury. Then the creditors can have recourse against the original stockholder or the purchaser from such stockholder with notice of the fact that it was not fully paid.

4. *Specific statutory provision.* In states where specific laws of the legislature have provided that stockholders are liable to creditors for the difference between what they pay in to the corporation and the par value of the stock received, it is not necessary to engage in such philosophical reasoning. In the light of such laws, the shareholders are contingently liable simply because the law requiring full payment has not been obeyed.* Even under this analysis, however, there is a conflict as to the exact effect of such statutes. If they are merely declaratory of the spirit or intent of one of the three views just given, only those who became creditors *after* the issuance of such non-fully paid stock would seem to be able to collect. If, on the other hand, these laws are to be interpreted strictly according to what they appear to say, both prior and subsequent creditors should possess this statutory right.

There are exceptions to the rule by which subscribing stockholders

* Norman S. Buchanan calls this the "simplest and most straightforward theory." *The Economics of Corporate Enterprise,* Henry Holt & Co., 1940, p. 95. Professor Buchanan classifies the possible theories of stockholder's contingent liability under three heads: the trust fund, the fraud or holding-out theory, and the statutory obligation theory (pp. 93-96).

or purchasers of stock with notice may be liable for the unpaid portion of the par value. Some courts have held that if creditors knew at the time they bought the bonds of the corporation that the stock was not fully paid, they can have no claim against the stockholders. A few courts hold that, if the corporation issued the stock in time of financial stress when it was impossible to sell it at or above par, the rule cannot be applied. If specific statutes cover the subject, however, such rulings by the courts would seem to constitute judicial lawmaking. Bondholders have also in many instances expressly waived their rights.

Development of no-par stock. To temper this stockholder's contingent liability (as well as to accomplish other purposes which will be brought out in our discussion), almost all of our state legislatures, beginning with New York in 1912, have passed general laws permitting the issue of shares without par value. There were a few no-par shares in existence before that time, and the idea of such stock had long been of interest to legal and economic philosophers. Certainly the acts of the New York state legislature gave an impetus to the use of no-par stock, which was so popular during the 1920's. Such shares are generally not permitted for banking and insurance corporations, are comparatively rare among railroads, whose stock had largely been issued before the enactment of no-par laws, are very common among industrial companies, and were frequently issued by public utility holding companies until their use was restricted by the Federal Public Utility Holding Company Act.

Under the no-par system, the stock certificates are marked "no-par value." The legally designated value of the share may be said to be x. Thus, when the stock is sold for \$50, the equation becomes in a sense $x = \$50$. This is good arithmetic and good logic. The stockholder's possible legal liability is $x - \$50 = 0$, which is also good logic and good arithmetic. No creditor, it is argued, can maintain that he was misled by any misrepresentation of the amount paid in by the stockholder. Nor can he claim that there is an implied promise to pay the balance. The par is x, and x has been paid in. There is no balance since $x - x = 0$.

In contrast, if a share of stock bearing a par value of \$100 is sold for \$50, the unpaid balance representing the contingent liability is \$100 – \$50 = \$50. To escape this liability, in the absence of special circumstances, the stockholder would have to prove that \$100 – \$50 = 0 or that \$100 = 50. Both of these questions represent both bad logic and bad arithmetic. \$100 – \$50 must equal \$50.

Accounting for no-par stock. There are, in general, three main methods of recording no-par stock on the balance sheet. In the first place, the stock can be given a stated value on the books equal to the proceeds of the sale to the subscribers. If 1000 shares are disposed of for $50 cash per share, the balance sheet and stock account will read as follows:

Cash..................	$50,000	No-par value stock, 1,000 shares, stated value $50	$50,000

A second method involves giving the stock an arbitrary or even a purely nominal stated value, say $10. If this is done, the difference between the $10 and the selling price of $50 can be credited to a capital surplus account. Thus, the balance sheet would read as follows:

Cash..................	$50,000	No par value stock, 1,000 shares, stated value $10.	$10,000
		Capital (premium) surplus	40,000

Many state laws insist on a minimum "stated capital," these requirements being generally $5 or at least $1 per share. Thus, our corporation could list the no-par stock at this required minimum stated value, say $5, and place the difference between such figure and the selling price of $50, or $45, in a capital surplus account. The company may, of course, list the no-par stock stated value at a higher figure than that required by law. Many critics contend that if there is a legally required minimum stated capital for no-par stock, such stock is really not "true no-par stock." *

* These authorities point out that the legal required minimum is really a par value in that if such amount is not actually paid in by the stockholder, he is contingently liable for the balance. A stock with such a minimum stated value requirement has been called a "quasi par-value stock." Cornelius W. Wickersham, *A Treatise on Stock Without Par Value of Ordinary Business Corporations*, Matthew Bender, 1927, p. 7. See also William E. Masterson, "Consideration for Non-par Shares and Liability of Subscribers and Stockholders," *Texas Law Review*, Vol. 17 (April 1939), pp. 247-96, and A. A. Berle, *Studies in the Law of Corporation Finance*, Callaghan & Co., 1928, p. 66, for the thesis that no-par stock with a minimum stated value requirement is really a form of par-value stock.

Under the third method the corporation could combine both the proceeds from the sale of the stock and any surplus subsequently developed into one stock account. The entire common-stock equity would then be placed under "stock." There would in this case be no distinction between common stock and surplus.

The third method has many practical difficulties and is rarely found. The first and second methods are most frequently used but the first seems to be the most desirable, particularly for the reason that it maintains the distinction between paid in capital and the other portions of the stockholders' equity. At the time of the organization of the company, the first and third methods give the same total, but the two figures will begin to pull apart when the company begins to develop an excess of earnings over the expenses and over dividend distributions.*

Arguments for and against no-par stock. The relative advantages and disadvantages of par and no-par stock have long been a matter of controversy. Advocates of par-value stock admit that the par figure has little economic significance and that it does not reflect or even influence the market value of the stock. Nevertheless, they say, par value does have an important function. It indicates for the records the funds which the stockholders have agreed to contribute. As we have seen many times, the corporation is a limited-liability organization. Creditors do not generally have recourse to the assets of individual stockholders, but this limitation is all the more reason why they should have the right to rely on a recorded and fixed amount as the capital stock of the corporation. The use of no-par stock, especially the "true no-par stock," for which no minimum stated capital is required, takes away this cushion.

The upholders of no-par stock answer that, while the creditors theoretically can regard the par value of the stock as a cushion, it is rather inadequate protection. It may seem attractive but it really has little substance. If the company becomes insolvent to the detriment of creditors, the chances are that they will be able to collect very little on the basis of the contingent liability of the stockholders. If the shareholders are sincere and conscientious, they may already have contributed many of their remaining assets to the corporation in order to stave off the evil day. If, on the other hand,

* For a concise description of the various methods of accounting for no-par-value stock, see R. H. Montgomery (ed.), *Financial Handbook*, 2d ed., Ronald Press, 1933, pp. 490-92. A new edition (the Bogen edition) of this Handbook was published in 1948.

they are willing to avail themselves of all legal loopholes, they may, within the law, have placed their property into safe hands, such as their wives'. Wives can be a financial convenience to the stockholders, especially of a closely held corporation, as well as to the partners in a partnership. Moreover, the very passage of time can diminish the effectiveness of the stockholders' contingent liability.

Furthermore, continue the advocates of no-par stock, if the consideration was given in the form of other property than cash, how does one know that par stock is fully paid? Most of the courts adhere to what is called the good-faith rule, according to which, if the directors acted without fraud and were aboveboard in evaluating the property or services acquired, the stock is conclusively considered to be fully paid. To create a contingent liability, the creditors would have to prove that the directors acted fraudulently—a rather difficult task. The mere giving of an excessive valuation to the property or services received does not in itself constitute proof of fraud.

The other, but less frequently used, method of determining whether stock is fully paid is the true-value rule. According to this, if the actual value of the property and services received is by a reasonable or true valuation less than the par value of the stock issued for them, the stock is not fully paid. In effect, however, the results of both rules tend to be the same. The value of an object or of a service is a matter of composite opinion. It is arrived at by bargaining, higgling, and the clash of opinions. A figure decided upon in good faith by the parties is likely to be the true value for all practical purposes. Value is subjective, not objective.

Then also, argue the no-par advocates, it is not the amount of the capital designated on the balance sheet that makes a corporation a good investment for bond buyers. It is, rather, the earnings and assets in relation to the number of bonds and shares outstanding that are important. The emphasis upon par value tends to obscure the corporate processes and to put emphasis upon a relatively insignificant concept. Moreover, par value tends to hinder the flexibility of financing. Because of the ups and downs of business, the same stock is likely at different times to sell at different prices. According to the theory of the law, to avoid contingent liability, corporations will normally always have to sell stock at or above the par value. Since, outside of the field of banking, common stock is seldom originally sold by the corporation for a price higher than par, the company using par-value stock has little leeway in its

financing, unless it resorts to some form of subterfuge, such as treasury stock (discussed later in this chapter). No-par stock, on the other hand, can be sold at varying prices in accordance with different conditions. It thus furnishes a flexibility which par stock does not have.

The advocate of par value answers that even though on paper no-par stock does give flexibility, it is not always practicable to account for it at these different prices. For instance, suppose a corporation sells 10,000 shares of stock at $20 per share. Then one year later it sells 5000 additional shares at $15 per share. Since all common shares of a corporation are similar, how can there be two groups of common stock? Furthermore, would not the sale of subsequent shares at a lower price than that paid for the earlier shares tend to thin out the equity of the early purchasers?

The no-par people eagerly offer solutions to these problems. They would compute the weighted average of the above prices and sales

thus:	10,000 shares sold at $20	$200,000
and	5,000 shares sold at $15	75,000
give a total of	15,000 shares	275,000

or $18.33 per share.

The company could allot $5 per share, or $75,000, to stated value and the balance of $200,000 to capital surplus. If next year the company sold 10,000 additional shares at $10, the average price received for all three issues would be $15, of which $5, or a total of $125,000 would be stated value, and $10, or a total of $250,000, capital surplus. This is true flexibility, says the advocate of no-par value. Moreover, the stated value can be shifted up or down by vote of the board of directors, provided it remains above any legally required minimum, thus permitting the directors further to augment or to reduce the capital surplus as circumstances may seem to require.

In answer to the point that subsequent sales at lower prices may thin out the equity of the earlier common stock, the advocates of no-par stock state that, of course, common stock should be protected by the pre-emptive right. This would give the existing stockholders the opportunity to purchase such subsequent stock, thus enabling them to retain their position in the corporation.*

These are really arguments which may boomerang against no-par-value stock, counter the opponents. Listing the stock at a figure

* See Chapter 15 for the method of computing the value of such rights.

lower than the amount received by the corporation may cause confusion. What, then, is the capital stock? The impression can easily get abroad that the amount over and above the figure given as stated value is really surplus available for the payment of dividends. If this excess is paid out, would not such dividends actually amount to a distribution of capital? And if the stated value can be changed merely by formal action of the board, rather than by the approval of the stockholders, what is to prevent manipulation?

Opponents of no-par stock also maintain that such stock may, under poor or dishonest management or adverse circumstances, really mean no capital at all. This tends to be true particularly if the law allows the directors to change the stated value. Many of our so-called no-par laws, as we have seen, require a minimum stated capital, which becomes a sort of par. Is this not an intimation or even acknowledgment of the value of a par figure? If such minimum has not actually been paid, the subscribing stockholders would probably be subject to the same contingent liability as they would if this had been the real par figure.

Some members of the no-par school of thought then go on to contend that the absence of a par value makes the prospective purchaser of shares more diligent in his investigation of their worth. In a business transaction *A* offers *B* a $5 bill in payment of a debt. If *B* is satisfied that the bill is genuine, he accepts it at its face value without question. Similarly, an investor may consider a stock certificate marked "par $100" as actually worth $100, without looking further into its real value. He may think he is getting a bargain if it is offered to him for less than $100, and he may think it is a "bad buy" if the price is greater than $100. The purchaser of securities, according to this thesis, is likely to overemphasize the significance of a definite figure or par value on the face of a stock certificate.

A no-par share, on the other hand, according to this line of argument, contains no hint of its value. It is simply x. The purchaser is put on his guard. He is made to realize that the value of stock is basically dependent upon the success of the company's business activities.

This argument constitutes a *non sequitur,* conclude the advocates of par stock. Any kind of seasoned stock has gone through evaluation by the general markets and has passed through the hands of large numbers of individuals. Even a newly issued share may have

been investigated by numerous analysts. These markets and individuals, on Main Street as well as in Wall Street, have committed many errors both of cupidity and stupidity, to be sure, but the misjudgments have not been due to a naïve reliance on mere par value. Par value may fool the utterly inexperienced person buying some untried stock which has not passed through any process of market evaluation. But par value alone cannot fool the market.

Declining popularity of no-par stock. Several recent influences, however, have slowed up, perhaps halted, the trend toward the no-par stock. In the first place, some of our statutes and regulatory agencies are hostile to this form of share. As we have already seen, the no-par share is strongly discouraged for banking companies, whose stock up to a few years ago generally carried the double liability feature. The Federal Public Utility Holding Company Act of 1935 requires new stock of public-utility-holding companies to have a par value, unless exception is made in special cases by the Securities and Exchange Commission. Railroad stock must generally have a par value.

In the second place, tax laws frequently have been such as to discriminate against the no-par share. Under the issuance tax a $10-par stock will probably pay one tenth as large a tax as a $100 par stock. These same tax laws, however, often treat all no-par shares as if they had a par value of $100. Thus, a $10-par stock might pay only one tenth as large a tax as a no-par stock with a stated value of $10. Taxes on transfers frequently also discriminate against the no-par stocks.* Finally, during the 1930's, when many corporations wished to reduce their capital stock in order to restore or build up their surplus, corporations having a no-par stock of a high stated value tended to substitute for it a lower par value. A large number of companies today have par value shares of $10, $5, $1, or even lower.†

* The federal transfer tax on stock selling under $20 per share is 5 cents per $100 par value or fraction thereof and 5 cents per share on no-par stock. For shares selling at $20 or above, the tax is 6 cents per share. Massachusetts charges 2 cents per $100 par value or fraction thereof or 2 cents per share if no-par.

† The voluntary recapitalization or adjustments accomplished in order to increase surplus and to permit the writing down of assets took several general forms: (1) change from high par to low par; (2) change from high no-par stated value to low par; (3) change from high par to lower no-par stated value; (4) change from high no-par stated value to lower no-par stated value; (5) maintenance of the same par, but reduction of the number of shares. Not all these adjustments, of course, favored the par-value stock. See also Chapter 12.

The anomaly of no-par preferred stock. If common stock represents a residual interest, it is necessary to know the amount of the residue. All prior claims, including preferred stock, should, therefore, have a definite amount assigned to them on the books. Though the par value of the preferred stock is supposed to furnish this figure, there are a number of illustrations of no-par preferred stock. When no-par preferred stock is outstanding, it becomes necessary to use its liquidation value or, perhaps, the call price as a step in computing the book value of the common stock. From the legal point of view, of course, the no-par feature may protect the subscribing preferred stockholder from contingent liability in the same way as it protects the holders of no-par common stock.

Treasury stock. Treasury stock, to which reference was made a few pages back, is one of the devices or subterfuges used to avoid the contingent liability in the case of par-value stock. By treasury stock is meant stock which after being issued fully paid is donated to the corporation or is sold back to it for part price. The company keeps the stock alive in its treasury. The corporation is free to give such stock away or sell it at any price it wishes, even below par, without subjecting the donee or purchaser to any liability for the unpaid amount. No dividends are paid on this stock while it is held by the corporation, nor does it carry a vote.

But, it will be asked, who will be so foolish as to pay a corporation full value for stock and then give it back to the company? The answer to this question is best given by illustration. Mr. Evans, with enough members of his family to satisfy the legal requirements as to the number of stockholders, forms a corporation to own and exploit a patent right or a manufacturing process. This property is valued at $100,000. Mr. Evans and his family receive in payment for this right or process 1000 shares of stock of a par value of $100. They thus own the entire stock interest in this company. Mr. Evans then turns 500 shares back to the corporation. This transaction does not harm Mr. Evans, in that he has not really given away anything at all. His position in the corporation remains the same as before. He (with his family) is still the sole stockholder. When this stock is re-sold by the company, the position of Mr. Evans will, of course, be altered, but it is done only by his request or consent. Moreover, the sale will increase the assets of the company.

Now consider, instead, a corporation which is a going concern with substantial assets. An inventor develops a basic process which

the company is eager to buy. It is estimated that this invention will save, that is earn, for the company about $10,000 per year. Let us assume that, to the company, $100,000 is the discounted present value * of this annual income or saving of $10,000 for the probable effective life of the invention. The company promises the inventor 1000 shares of the stock of a par value of $100, but the agreement stipulates that he is to return 500 shares to the company. This donated stock is now fully paid and may be resold by the company at any price.

The objection is advanced: Was not the patent really worth only $50,000 in the first place? Was not the original stock, therefore, really only partly paid? The answer to these questions revolves around the fact that value, being a matter of opinion, is at best uncertain. Perhaps it may have been set a little high, but excessive valuation is not necessarily indicative of bad faith on the part of the directors. This is an example of the kind of subterfuge which, it is argued, will be eliminated by the use of no-par stock.

There are other reasons why a corporation will acquire treasury stock. Such stock may be later canceled in order to improve the position of the company's surplus or even to wipe out a deficit. Or it may be sold to employees at a special price below par, or even given to them free of charge, without subjecting them to any special contingent liability. Sometimes a company has used its treasury stock as a way of speculating on the market. This practice can readily lead to attempts to manipulate the market. Substantial purchases by a company of its own stock are carefully watched by the Securities and Exchange Commission.

Economic and legal significance of par value of bonds. In contrast to the case of stocks, the par value of bonds does have economic and legal significance. The par value does not necessarily represent the amount paid in by the bondholders, since bonds may be sold to the public at a price below or above par, but it does indicate a definite legal liability on the part of the corporation to repay that sum. Since the bond generally has a maturity date, its par value, like a call price of a preferred stock, exercises an effective restraining influence upon the height to which its market price may rise even in the event of extremely low market interest rates. Anyone who purchases a bond will have to consider the following in computing the actual return or yield which he will get on his money:

*** See Chapter 19 for a discussion of the present value of future income.**

(1) the price at which it is bought in relation to the par; (2) the coupon rate of interest, that is, the rate specified in the contract; and (3) the length of time until maturity. In the case of stock, about the only way to compute the rate of return is to divide the rate of dividend reasonably to be expected by the price paid, say $2 annual dividend by $40 purchase price of the share.*

Summary. In the economic sense the par value of a share of stock has little importance, but from the legal point of view it is of great significance. The listing of a stock at a par value in the corporation's accounts may constitute a representation that that amount has actually been paid to the issuing corporation. The amount received by the company may, however, vary from the par figure. If the consideration received is greater than the par value, the corporation will create a premium surplus, which is a form of capital surplus. If the consideration is less than the par value, the deficiency may be accounted for in three general ways: (1) by subtracting the discount from the total par and showing under total outstanding stock on the balance sheet only the amount received; (2) by listing the stock at full par value and pumping up the value of the assets to correspond; (3) by listing the stock at the full par value and including under the assets a specific item called discount.

Even if the issuing company which has received only part value admits in the certificate that the stock is fully paid and nonassessable, a liability in favor of subsequent creditors may crop out if the corporation should prove not able to pay its debts. The corporation itself, of course, has no such claim to the balance. Such contingent liability in favor of creditors has been justified on various grounds. If the corporation has received property other than cash in payment for the stock it has issued, good faith on the part of the directors in setting the value at or above the par of the stock issued; in spite of the fact that its actual value proved to be much less, will relieve the purchaser from liability in most jurisdictions.

No-par stock was developed, among other reasons, to eliminate or to modify such contingent liability. The pure no-par stock can involve no liability since there is no figure which can serve as a yardstick to determine the adequacy of the consideration. Many states require a minimum stated value in the case of no-par stock. Such stated value amounts to a form of par value. A controversy has long been carried on as to the relative merits of par and no-par

* For a discussion of yield and related concepts, see Chapter 19.

stock. Though for many years, particularly since 1920, no-par stocks have been popular, there is some tendency now to favor par value. In many cases the law requires a par value. The tax laws seem to discriminate against no-par stock. The recapitalization process * seems to have favored the use of a low par instead of a higher no-par stated value. Finally, the device of the treasury stock has enabled corporations to sell stock at a price below par without subjecting the purchaser to a contingent liability. Moreover, the law and the courts have been rather free in developing exceptions to the general rule of contingent liability.

While par value has little economic significance in the case of stocks, in the case of bonds it has both economic and legal significance. Here it represents a definite and legal liability of the corporation to repay.

PROBLEMS

1. Which is the most important in regard to stock: market value, par value, or book value? Is there any necessary and logical relation among these?

2. Mortimer B. Daniels (in *Michigan Business Studies,* Vol. VI, No. 1 (1934), p. 85), states that out of 159 balance sheets which showed a treasury stock account, such stock was shown as an asset in 94 cases, as a deduction from proprietorship in 61 cases, and partly as an asset and partly as a deduction in 4 cases. Some of the corporations listed the treasury stock under current assets.

a. Why might a company want to own its own stock?
b. Was the prevailing practice as shown in Daniels' tabulation in accordance with sound financial practice?
c. If listed under assets, should treasury stock be considered a current asset?

3. Burroughs Adding Machine Company in 1946 reports its capital and surplus account as follows:

Capital as fixed by the bylaws divided into 5,000,000 shares of authorized and issued no-par value stock	$25,000,000
Income retained in business	9,388,807
Less: Reacquired stock—20,000 shares at cost	310,706
Total	$34,078,101

* For an analysis of the recapitalization process see Chapter 12.

a. How does Burroughs treat its reacquired stock?

b. At what price per share did it reacquire such stock?

c. How does its general practice in recording this stock compare with that of the United States Steel Corporation? (See Chapter 8, p. 128.)

d. The law generally provides that corporations may buy their stock only out of surplus, not out of capital. What is the reason for this rule? When a corporation buys shares of another company this legal rule does not apply. Why not? How many of its own shares would Burroughs be allowed to buy at the price which it paid for the stock already held?

4. Statement by the New York State Bar Association's Commission on Corporation Law (1911), referring to its proposed no-par value statute:

> [The bill] proceeds upon two theories, or rather with reference to two conditions: first, the absolute necessity of telling the truth; secondly, the relief from the necessity of telling a lie.

To what extent do you think this statement describes the philosophy of the no-par stock?

5. Does the par value of bonds have legal significance for the same reason as does the par value of stocks?

Chapter 8

The Corporation's Financial Statements

Introduction. The basic financial data of a corporation are to be found in the profit and loss or income statement and the balance sheet. The accountant uses a large number of important supporting and analyzing reports, such as the trial balance, working sheets, application of funds, and reconciliations, with which we are not here concerned. Our emphasis is upon the profit and loss statement and the balance sheet.

The profit and loss report feeds into the balance sheet. The former represents action; the latter gives the condition of the company on a stipulated date. Pages 120-121 give these basic statements for the United States Steel Corporation and its subsidiaries.

The income account—the receipts and expense items. We note from the consolidated income account of this corporation and its subsidiaries that the United States Steel Corporation (we shall use the words "corporation" or "the company" as synonymous with the system) sold $1,485,666,554 worth of goods to outsiders during 1946. It used up $589,606,301 worth of inventories (cost of goods sold) and it also spent $617,355,706 for other costs of operations, making a total of the costs of sales and operating expenses of $1,206,962,007. The company incurred expenses of $61,997,723 for general administration and selling and $9,120,897 for various forms of private pensions and group insurance. This item did not include social security taxes. The company charged off depreciation and depletion amounting to $68,739,174 after account had been taken of profits on the sale of some of its plant and equipment. It also made an allowance of $825,330 to take care of doubtful accounts receivable and for estimated losses on investments. In 1945, there was a large write-off, or amortization, of war emergency facilities, but in 1946 there was no allowance for this purpose. The taxes outside of those on income, but including social security taxes, aggregated $52,404,911.

CONSOLIDATED INCOME ACCOUNT OF THE UNITED STATES STEEL CORPORATION AND SUBSIDIARIES *

	Year ended Dec. 31, 1946	Year ended Dec. 31, 1945
Sales and revenues less discounts, returns, etc.	$1,485,666,554	$1,740,464,055
Cost of sales and operating expenses	1,206,962,007	1,398,031,042
General administration and selling expenses	61,997,723	53,088,957
Pension expenses	9,120,897	28,975,958
Provision for doubtful accounts	825,330	341,160
Taxes, other than income	52,404,911	54,635,597
Depreciation and depletion	68,739,174	77,140,359
Amortization of emergency facilities	....	44,215,710
Operating profit	$ 85,616,512	$ 84,035,272
Other income	11,223,102	7,215,766
Total income	$ 96,839,614	$ 91,251,038
Loss on capital assets	.. ....	2,064,848
Estimated additional costs from war	cr 29,212,714	cr 2,600,883
Interest on long-term debt.	3,094,895	3,367,367
Amortized debt discount and expenses	1,682,240	133,285
Balance	$ 121,275,193	$ 88,286,421
Provision for federal income taxes	32,000,000	30,000,000
State and foreign income taxes	652,718	271,365
Net income to surplus	$ 88,622,475	$ 58,015,056
Earned surplus beginning year	374,607,348	376,624,976
Preferred dividends	25,219,677	25,219,677
Common dividends	34,813,008	34,813,008
Earned surplus end of year	$ 403,197,138	$ 374,607,347

* From reports filed with the Securities and Exchange Commission, as recorded in *Moody's Manual of Investments—Industrials.* The Annual Report of the Corporation to its stockholders has also been used for various explanatory items.

A consolidated statement involves combining the accounts of all the companies in such a way as to show the composite relation of the whole group to the outside world. This means that the duplications or intercompany accounts are eliminated. For instance, if one subsidiary owes a debt to another, both the receivable of the one and the payable of the other are eliminated. Similarly, if the holding company owns, say 100 percent, of the stock of its subsidiary, the entire amount is excluded both as an outstanding proprietary item of the issuing company and as an asset of the owning company. If, however, the holding company owns only, say, 80 percent of the stock of its subsidiary, only that amount is excluded. The par value of the 20 percent held by individuals outside the system, together with equity of that proportion in the surplus of the issuing company, are recorded in the consolidated statement under liabilities as a "minority interest." Any sales of goods or services by one company to another in the system, together with the resulting profits or losses, are excluded.

CONSOLIDATED BALANCE SHEET OF THE UNITED STATES STEEL CORPORATION AND SUBSIDIARIES

ASSETS

	Dec. 31, 1946	Dec. 31, 1945
Cash	$ 222,048,651	$ 231,820,174
U. S. Government and other market securities	311,319,425	197,537,000
Notes and accounts receivable after reserves	137,875,666	117,803,916
Inventories	283,395,546	270,599,494
Total current assets	$ 954,639,288	$ 817,760,584
Miscellaneous investments and other assets	24,515,701	27,446,932
Property, plant, and equipment	2,568,247,535	2,409,768,360
Less: Reserve for depreciation and depletion	1,741,374,188	1,707,264,223
Net fixed assets	$ 826,873,347	$ 702,504,137
Intangible assets	1	1
Inventory of sundry parts, supplies, etc.	23,350,419	23,751,863
Fund segregated for capital expenditures	168,000,000	308,000,000
Mine stripping and other costs applicable to future periods	6,138,651	11,305,258
Total	$2,003,517,407	$1,890,768,775

LIABILITIES

	Dec. 31, 1946	Dec. 31, 1945
Current accounts and pay rolls	$ 185,730,493	$ 147,526,167
Accrued taxes not due	118,497,240	40,388,532
Bonds, mortgages, etc., due	6,324,446	14,077,462
Dividends payable	15,008,171	15,008,171
Total current liabilities	$ 325,560,350	$ 217,000,332
Long-term debt	81,197,155	78,638,831
Contingency and miscellaneous reserves	55,280,933	52,836,304
Insurance reserve	58,943,763	59,135,178
Reserves for additional war costs	27,961,425	57,174,139
Preferred stock	360,281,100	360,281,100
Common stock	652,743,900	652,743,900
Capital surplus	38,351,643	38,351,643
Total stock and capital surplus	$1,051,376,643	$1,051,376,643
Earned surplus	403,197,138	374,607,348
Total	$2,003,517,407	$1,890,768,775

After these expenses and costs the operating profit of the company was $85,616,512.

In addition to the above there were certain items of income, which are itemized in the reports as including dividends and interest from securities of organizations not included in the system, and rents and royalties. We have listed these receipts under "other income" of $11,223,102. When this is added to the operating profit, the total income becomes $96,839,614.

Net income. The company had been making allowances for certain additional war costs in previous years. The actual costs, including strike costs, after making adjustment for the effect on the income tax bill, were less than those provided for. The allowance of $29,212,714 as additional costs should really, then, be subtracted from (credited to) the expenses for the year, or what amounts to the same thing, added to the income. The company paid out $3,094,895 in interest and allowed for the writing off or amortization of certain discounts and deferred assets of $1,682,240. The result of all this was a balance, before income taxes, of $121,275,193. After making an estimate for federal income taxes of $32,000,000 and after paying certain state and foreign income taxes, the company found itself with a net income of $88,622,475.

In noting how the company disposed of this net income, you should first look at the figures for the year ended December 31, 1945. There you see that the earned surplus of the company at the end of 1945 was $374,607,348. The net income for 1946 is added to this surplus and from this total is subtracted the dividends paid in 1946. These were $7 per share on the 3,602,811 outstanding shares of preferred stock and $4 per share on the 8,703,252 shares of common stock. After provision for these dividends had been made the company's earned surplus at the end of the year 1946 became $403,197,138.

Balance sheet—similarity to Anthony, Barr & Cooper. There is no fundamental difference between the asset side of the balance sheet of the United States Steel Corporation and that of the partnership of Anthony, Barr & Cooper. The arrangement happens to be different. The items on the balance sheet of United States Steel are arranged in order from the most liquid, namely cash, to the least liquid, namely certain unmined ore royalties and "mine stripping and other costs applicable to future periods." This last account represents expenditures in stripping the surface dirt away so as to

make the ore available for mining. Such expenditures have been "capitalized," that is, treated as an asset. They are to be written off, or amortized, over a period of years, according to the number of tons mined.

There is no reason why the assets on the Anthony, Barr & Cooper partnership balance sheet could not have been arranged in order from the most liquid to the least available or why, similarly, the accounts on the United States Steel Corporation's statements could not be arranged in order from the fixed to the liquid. The purpose of the balance sheet will often influence the arrangement of the items. The arrangement frequently varies with the nature of the company's business. Public utility balance sheets generally have fixed assets at the top, while those of industrial companies often begin with the current assets. The items on the liability side are arranged in a similar manner. If the assets side begins with current assets, the liability side will start with current liabilities. If the assets open with fixed assets, the right hand side should begin with capital stock and bonds.

Differences. There are important differences, however, between the proprietary accounts of the typical partnership and those of the corporation. The capital of a corporation must be definitely described, and a sharp distinction should be made between its capital and the various surplus accounts. A partner may draw on his share of the individual profits (generally called "drawing account") at will and with very little formality. A corporation shareholder, on the other hand, is legally distinct from the corporation. He may receive a dividend only by a formal resolution of a quorum of the board of directors.

A partner can legally withdraw a part of his capital,* if done by the permission of all the other partners. By unanimous agreement, the partners can increase or reduce their permanent capital investment in the company. A corporation, on the other hand, cannot pay out its capital to the stockholders even with their unanimous consent. The capital paid in by the stockholders may be looked upon as a background or protection for the creditors.

These distinctions arise from the fact that partners have unlimited liability, while the stockholders, generally speaking, can lose only what they have put into the corporation as permanent capital. The

* For the different usages of the word "capital," see pp. 135-136 of this chapter and Appendix A.

conclusion follows that this capital should not be returned to them, even in part, while there are creditors.* Any dividends paid out of capital are illegal and in case of financial difficulty may be recovered by the creditors from the directors who voted them or from the stockholders who received them, knowing that they constitute a return of capital.

In the partnership, on the other hand, the partners are subject to unlimited personal liability. If partners, by their mutual agreement, return to themselves a part of their permanent investment, such payment would probably be legal, but if the partnership assets become insufficient to pay the debts, the creditors, as a general rule, would have access to the personal estate of any or all of the partners. Even if a partner had withdrawn all his capital and had left the organization by consent of the other partners, such special return of capital would be legal, but those individuals who were creditors at the time of this partner's withdrawal could hold him personally liable for debts incurred up to that time, if the firm gets into difficulty and if the partnership assets are insufficient to meet its obligations.

Necessity of clearly defining capital. The capital must, therefore, be clearly defined in the case of the corporation. The proprietary reserves and surplus items should also be clearly described or "earmarked." Partnerships, as a general rule, carry very few, if any, proprietary reserves or earmarked capital items. Capital and drawings are as a rule their only proprietary accounts, though the partnership of Anthony, Barr & Cooper did have one proprietary reserve, namely a reserve for contingencies. A going corporation may have several surplus accounts, such as capital surplus and earned surplus, "appropriated" and "free" surplus. A corporation often has several proprietary reserves, which are really a part of surplus, such as a reserve for contingencies, or for additions and extensions, or for sinking fund, or for stabilization of dividends.

* An exception is made in the case of a mining company. If a corporation's assets are being steadily depleted by extracting operations and not replaced by newly acquired resources, accountants and courts recognize that essentially the assets are being used up and a corresponding reduction must eventually take place in the amount of the capital investment. In such cases, the dividends include a portion of the capital stock. Incidentally, the portion coming out of the capital stock is not taxable as income to the stockholder. It is really a return of his investment. Creditors extending funds to such mining company are presumed to be aware of these facts.

The existence of pressure groups has been a factor forcing the setting up of various such proprietary reserves. The stockholders cannot directly by their vote authorize a dividend, but they can exert pressure to have dividends declared or they may even overturn the board of directors. Since stockholders by the very nature of their position cannot be as familiar with their company's needs and long-time welfare as are partners with their organization, the corporate management often finds it necessary to set up special proprietary accounts or sometimes even hidden or secret reserves in order to build up defenses against stockholders thirsting for additional dividends. It may also have to set up similar defense against politicians and labor leaders.

Ratio of current assets to current liabilities. To resume with the balance sheet of the United States Steel Corporation: We note that the current assets total $954,639,288. On the other side of the balance sheet, the current liabilities appear as $325,560,350. The ratio of current assets to current liabilities, that is, the current assets divided by the current liabilities, is 2.93 to 1. The net working capital or the difference between the two, is $629,078,938.

Fixed assets. The next group of assets is the fixed assets, which include certain investments of a permanent nature and the main physical plant of the company. The depreciation is generally figured on a straight line basis.* The corporation also makes regular depletion allowances on its mining property, and during the war it provided for a special amortization over a period not in excess of five years for its emergency facilities. All these allowances are indicated on the balance sheet as a subtraction from the gross value of the fixed assets. The total depreciation and depletion reserves, it will be noted, are about two thirds of the cost value. This leaves net fixed assets of $826,873,347.

The intangible assets are valued at $1, a situation to which we will again refer. The company has certain sundry parts and operating supplies worth $23,350,419 and has segregated some of its funds into an account for câpital expenditures, that is, for additions to its plant. This "fund" totals $168,000,000.

* Under the straight line method the computation is made as follows: (1) Estimate the life of the asset; (2) determine its scrap value; (3) find the difference between the cost of the asset and this scrap value; (4) divide this difference by the number of years of life. The quotient is the annual depreciation. This rate will be revised if a change in the life of the asset becomes apparent or probable.

As we go down the list of accounts under "Liabilities" we note the presence of accounts payable and accrued taxes and wages. The bonds and mortgages under current liabilities include not only those that are immediately due but also any that will mature within one year. The United States Steel Corporation and its subsidiaries have outstanding some $81,197,155 of long-term debt, due after one year. Many of the subsidiaries long ago issued bonds which were either assumed or guaranteed by the United States Steel Corporation. Several of the subsidiary companies own railroads and have issued equipment trust obligations maturing serially over periods of ten to fifteen years. Of these obligations of various kinds, $6,324,446 will fall due within a year. These are logically included under current liabilities.

We also note that the current liabilities include the item "dividends payable." Directors cannot in general be compelled to declare dividends, even on preferred stock. Why, then, are dividends mentioned as a current liability? The answer is that when dividends have been declared they become a legal short-time liability. When such declarations have been made and announced, the stockholders become general creditors to the extent of the dividends.

Reserves. There are three main reserves on the liability side: (1) contingency and miscellaneous reserves; (2) reserves for additional costs arising out of the war; (3) insurance reserves.

Of the contingency and miscellaneous reserves the main part, according to the Annual Report to the Stockholders, is for general contingencies, but a portion is also set aside for replacement of ore-carrying ships lost, and for accident and hospital expenses for employees. The company in 1946 had set up no reserve for the portal-to-portal suits. The reserves for additional costs arising out of war was $57,174,139 at the end of 1945. The amount of $29,212,714 was charged to it during the year, representing an allowance in 1946 for a cost really provided for in prior years, therefore, this item was a credit to the expense accounts, as we have seen. A balance of $27,961,425 was on the books as of December 31, 1946.

The insurance reserve deserves special mention at this point. Though the company insures some of its property with outside agencies, much of the protection is obtained by the process of self-insurance. Under this plan the company sets up an insurance reserve and makes annual additions to it instead of paying premiums to a separate or independent insurer. Whenever a fire or casualty occurs,

the company accountants debit (reduce) this reserve and credit (reduce) the respective property account by the appropriate amount.* This method of insurance is especially applicable when a company's assets are in the form of numerous small and widely scattered units. The United States Steel Corporation used up very few of these reserves during the year, adding to the reserve exactly what was charged.

Earned versus capital surplus. The surplus accounts are of two general kinds: earned and capital. Earned surplus is that which has arisen through profits of the business or through income from the sale of property. The United States Steel Corporation had earnings of more than $88,000,000 in 1946. These were added to the earned surplus account. This earned surplus is the regular and usual source of dividends on the stock.

The capital surplus may come from several sources or accounting processes. In the case of the United States Steel Corporation it developed in this way: Stock was sold by the corporation over a period of time at a price above $100 per share, which for a long time was the par value of the stock. This premium amounted to $81,250,022. In 1937 the company, by the consent of the stockholders, lowered the common stock from a par value of $100 to a no-par stated value of $75. On 8,703,252 shares outstanding this accounting decrease of $25 per share totaled $217,581,300. This added to the premium

* The two practices, insurance with an outside insurer and self-insurance, may be briefly compared.

1. For insurance with an insurer, the company pays premiums, say, every three years, the amount of such premiums immediately becoming "prepaid insurance," a deferred asset. As this prepaid insurance is used up, it becomes a part of the expenses, which, presumably, is included in the prices at which the company sells its products to the customers. As the accountant would put this, insurance prepaid (an asset) is debited and cash is credited as the premium is paid, and insurance expense is debited and insurance prepaid is credited as the premium is used up by the passage of time. In the case of self-insurance, on the other hand, the company pays out no cash, but makes a bookkeeping charge to insurance expense, which amount is also presumably included in the selling price. Insurance expense is debited, but a reserve for insurance, rather than cash, is credited. This is repeated period after period. A credit to a reserve account means that the account is built up or added to, by the appropriate amount.

2. When a building burns, the first company collects a cash indemnity covering the loss or the cost of replacing the asset, the maximum collectible being, of course, the face of the policy for this building. Thus cash is debited and buildings are credited. (We are taking no account here of the disposal of the reserve for depreciation which had probably been set aside over the years

from sales above par totaled $298,831,322. At that time the value of the intangible assets on the books was $260,368,522. Since the company wished to list these intangibles at a nominal value of $1, the amount of $260,368,521 was written off. This decrease was subtracted from the $298,831,322 total capital surplus just computed. The result was $38,462,801. The company some years ago acquired 2766 of its own shares in connection with a projected employee stock-purchase plan which was later abrogated. The company purchased these for $111,158. The corporation does not consider these shares as an asset but it rather subtracted their cost from the capital surplus. After such subtraction the capital surplus became $38,-351,643.

The intangibles. We have just referred to the fact that the sum of $260,368,521 was written off from the value of the intangibles. Their value was then set at $1. The technical orthodox method of evaluating intangibles has been to list them at their purchase price or cost to the company. The tendency toward a constructive conservatism in financial policy, as well as the uncertainty as to the value of such items, and the difficulty of deciding the amount to be written off, or amortized, each year, have led to the practice of giving intangibles a purely nominal valuation, such as $1 or $5. Patents and copyrights have a limited term (seventeen years for patents and twenty-eight years, with an option of renewal, for copyrights). If assigned a substantial value, they must be amortized through an annual charge to expenses or operations over a period of years preferably much shorter than the legal life. Even if apparently adequately amortized, their book value may be violently affected by new discoveries and writings and by a changing public demand.

Intangibles such as good will, representing the ability of the company to earn an excess income above the normal or average in the industry, have no legal life span, but they should also be amortized rapidly, preferably by charges directly against surplus. Sound ac-

for the building.) The second company, on the other hand, charges the loss to, that is, subtracts it from, the reserve for insurance and credits it to the building account (again ignoring the reserve for depreciation).

3. Upon rebuilding or restoring, each company debits buildings and credits cash. The first company has put the burden for the loss upon the insurance company through the payment of premiums. The second company has placed the burden for the loss upon itself, basing the risk, as we indicated in the text, upon the fact that it owns numerous widely scattered units, each having a very small value in comparison with the total assets.

counting seems to dictate that good will be given a value on the books only if it has been purchased for a price. Theoretically, good will is permanent, but competition is continually jeopardizing its existence. Good will is difficult to isolate and evaluate as a separate asset. Its presence on the balance sheet, as well as that of other intangibles, complicates the analysis of a corporation's financial data and makes difficult a comparison with those of other companies. Many companies recognize these problems, but they also wish to tell the world that they own intangible assets. The best way of doing this is to evaluate them at a mere nominal figure.

The value of the tangible assets over and above the liabilities of all kinds to outsiders, including any nonparticipating preferred stock as a "liability," * constitutes the equity or investment of the common stockholders.

After subtracting the value of any intangible assets, which are listed as worth only $1 in the case of the United States Steel Corporation, we can consider the remainder as the book value of the common stock, often called the common-stock equity. When this is divided by the number of common shares outstanding, the result is the book value per share of common stock.

* In computing the book value of the common stock it is necessary to exclude or subtract all accounts coming ahead of this stock. Preferred stock, which is also often considered as virtually a liability, should be subtracted. The treatment of the preferred stock gives rise to several problems, the nature of which can be briefly indicated (1) If the liquidating value is different than the par value, it is best to use the par value unless one has some special reason for desiring the book value in case of liquidation. (2) If dividends have been declared and are not yet paid, or if there are accrued dividends in the case of a cumulative preferred stock, such unpaid and accrued dividends must be added to the par figures used. (3) If the preferred stock is participating to an unlimited extent as to assets and earnings, the preferred shares should be included under the common stock in our computation. (4) If the preferred stock is no-par, it might be well to take "effective par value," rather than the stated value, as the basis of computation. Benjamin Graham and David L. Dodd, *Security Analysis,* 2d ed., McGraw-Hill Book Co., 1940, p. 570.

No-par preferred stock, for instance, carrying a $5-dividend rate, callable at 105, but listed on the balance sheet with a stated value of only $10, should clearly be considered as having an "effective par value" of $100. Graham and Dodd mention the Coca Cola no-par cumulative Class A preferred stock, dividend rate of $3 and a stated value of $5, which is callable at $55. The effective par value was really $50 for the purpose of computing the residue available for the common stock. In 1929 the company carried 194,000 of these shares, which it had repurchased, as an asset valued at $9,434,000, though the entire issue of 1,000,000 shares was listed on the liability side at only $5,000,000 (stated value per share was $5). *Ibid.,* p. 570.

Computation of book value. There are two general methods of computing the book value of a share of common stock. To illustrate these, let us assume the following simplified balance sheet:

	Assets			Liabilities	
A	(Land)	$ 100	L	(Common stock, 50 shares, par $10)	$ 500
B	(Depreciated or net value of buildings)	300	M	(Capital surplus)	50
C	(Depreciated value of machinery)	75	N	(Earned surplus)	100
D	(Current assets)	550	O	(Proprietary or surplus reserves)	75
E	(Good will and other intangibles)	125	P	(Reserves for liabilities and for insurance)	55
			Q	(Preferred stock, total par)	100
			R	(Bonds)	150
			S	(Current liabilities)	120
	Total assets	$1,150		Total liabilities	$1,150

Method 1. Find the total of the assets minus the intangibles. Subtract from this result the liabilities and other items which represent claims ahead of the common stock. Divide this remainder by the number of common shares outstanding. The formula for this will be:

$$\text{Book value of a share of common stock} = \frac{(A + B + C + D) - (P + Q + R + S)}{50}$$

Substituting,

$$\text{Book value of a share of common stock} = \frac{(100 + 300 + 75 + 550) - (55 + 100 + 150 + 120)}{50}$$

$$= \frac{1025 - 425}{50} = \frac{600}{50} = \$12.$$

Method 2. Find the items on the liability side which represent the equity of the common stock. This is obviously those items which do not represent obligations or accounts ahead of the common stock.

These proprietary items are *L, M, N,* and *O*. Subtract *E* (good will and intangibles) from the total of these proprietary accounts. Divide the result by the number of shares of common stock.

$$\text{Book value of a share of common stock} = \frac{(L + M + N + O) - E}{50}$$

Substituting,

$$\text{Book value of a share of common stock} = \frac{500 + 50 + 100 + 75 - 125}{50}$$
$$= \frac{600}{50} = \$12.$$

These methods are essentially the same, but *Method 2* seems to be much the simpler. Let us now apply this to the United States Steel Corporation.

The common stock proprietary items at the end of 1946 were:

Common stock stated value .	$ 652,743,900
Capital surplus, after making a deduction for the cost of the stock held in the Treasury . .	38,351,643
Earned surplus	403,197,138
Reserve for contingencies (as obtained from the Report of the Corporation to its Stockholders) . .	35,527,539
Reserve for estimated additional costs arising out of war	27,961,425
Total common-stock equity	$1,157,781,645 *

* Minus, of course, $1, the value assigned to the intangibles. In many companies this subtraction is of real significance.

There are 8,703,252 shares of common stock outstanding. Dividing $1,157,781,645 (minus $1.00, the value of the intangibles) by 8,703,252, we get a book value of $133.03 per share. Some financial analysts in computing book value include only the common stock and capital and earned surplus. They do not include the proprietary or surplus reserves, such as the reserve for contingencies and additional costs. The arguments for excluding these accounts lie in the fact that the proprietary reserves may be used up. On the other hand, it can be strongly argued that the actual book value at some *specific instant* of time should include the reserve for estimated additional costs arising out of war, since the additional cost at the time has not occurred. It should also include reserves for contingencies, which may be used, it is true, but they have not been used at the time

of computation. Reserves which are "turned over" frequently, such as accident and hospital expense reserves, should not be considered as a part of the stockholders' equity or book value. They have many elements of a liability reserve. Considerable argument could also be presented for including the reserve for insurance under the stockholders' equity or book value of the common stock.

One of the strongest practical arguments for including only the common stock and the capital and earned surplus under the common-stock equity, or common-stock investment as it is often called, is the fact that many balance sheets as reported do not reveal the exact amount of each kind of reserve. Some corporations classify them in various groups, such as contingency and miscellaneous reserves, or insurance and other reserves, or simply "special" and proprietary reserves.

If the common-stock equity is considered simply as the common stock and capital and earned surplus, the book value per share of common stock would be

$$\frac{\left\{\begin{array}{c}\$652{,}743{,}900 + \$38{,}351{,}643 + \$403{,}197{,}138 \\ - \$1 \text{ (the value of the intangible assets)}\end{array}\right\}}{8{,}703{,}252} = \$125.73.$$

Several other relationships or ratios may here be computed. The earnings per share of common stock are found by subtracting the preferred dividends from the net income and dividing this difference by the number of shares of common stock. The figures are

$$\frac{\$88{,}622{,}475 - \$25{,}219{,}677}{8{,}703{,}252} = \$7.28.$$

Since the corporation paid dividends on the common stock of only \$4 per share, it may be said to have reinvested the balance of the earnings, or \$3.28, in the business.

Times charges earned. Another relationship is "times charges earned." This is designed to indicate the amount of support given to bond interest and similar items. In the case of the United States Steel Corporation the interest on the long-term debt is \$3,094,895 and the amortized debt discount * and related expenses are

* If a company issues and sells a \$1000 bond for only \$900, it must nevertheless repay the entire \$1000 at maturity. The \$100 discount must be written off at an appropriate rate. Such annual write-off is called amortized bond or debt discount and is for all practical purposes as much of a fixed charge as the interest on the bond.

$1,682,240. The total of these is $4,777,135. How many times are these charges covered?

In answering this question it is necessary to find the income before these charges are paid but after income taxes have been provided for. The balance or net income to surplus is given on the income statement as $88,622,475. The "charges," as we have seen, were $4,777,135. If we add $4,777,135 to the net income of $88,622,475, we get $93,399,610 which is the amount available for the payment of such fixed charges. Dividing $93,399,610 by $4,777,135, we get 19.55, which is the times charges earned.

Rate of return. The "rate of return on the investment" is another concept frequently used. To compute this, it is first necessary to find the "investment." There are in general, three bases of investment, namely the total long-term investment, the stockholders' investment, and the common stockholders' investment. The total long-term investment may be defined as the sum of the par of bonds and other long-term debt and the par or stated value of all the stocks, plus the surplus and proprietary reserves. The stockholders' investment includes all of these items except the par value of the bonds and other long-term debt. The equity or investment of the common stock is the total stockholders' investment minus the preferred stock. It should be emphasized that the listed value of all intangibles must be subtracted from the investment as computed from the accounts on the books.

Next we must find the "return." This is a profit concept which varies with the purpose of the analysis. If we wish to compute the rate of return on the total long-term investment, we find the profit from all sources before deducting fixed charges, such as interest on the bonds or long-term debt. Many analysts take the figure before provision has been made for income taxes. In this event they include reserve for such taxes as a part of the investment. Their basic argument for this procedure is the fact that net income taxes are dependent upon profits and really represent a division of the earnings. In our computations we will take the return after income taxes on the theory that they are fundamentally a cost.

The return on the total long-term investment for the United States Steel Corporation for 1946 is the net income to surplus of $88,622,475 plus the interest and amortized debt discount, or a total of $93,399,610. The total investment is the common stockholders' equity or $1,157,781,644 plus the preferred stock of $360,281,100 and long-term debt of $81,197,155 or a total of $1,599,259,899. From this

figure we subtract the value of the intangibles, or $1. Dividing this into $93,399,610 we get a rate of return on the total long-term investment of 5.8 percent. The return on the common stockholders' equity is the net income of $88,622,475 minus preferred dividends of $25,219,677 which equals $63,402,798. The equity of the common stock is $1,157,781,644. Dividing this into $63,402,798 we get 5.5 percent. The rate of return on the stockholders' investment is $88,622,475 divided by the sum of the common stock equity and the preferred stock.

The amount of the investment is sometimes computed by adding the net value of the fixed assets and the net current assets or net working capital. The theory of this is that the assets of a company are fundamentally of two kinds—fixed and current. These come in the final analysis from people to whom the company owes money on a short-term basis and from those who have contributed permanent funds. When we subtract the current liabilities, the remainder constitutes the investment by the long-term contributors of funds, namely the bondholders and the stockholders. Computed in this way, the total investment of the United States Steel Corporation in 1946 was

$$\$826,873,347 + \$954,639,288 - \$325,560,350 = \$1,455,952,285$$

This method is not frequently used for industrial companies. For various reasons it is better adapted for public utilities.

Equity securities versus nonequities. The corporation is a legal entity, and as such it owns the assets. It received the assets in some form directly from the creditors and directly and indirectly from the stockholders. The stockholders own the stock, but they have no legal claims to the income or to the assets of their corporation. If the directors exercise good faith in their decisions, the stockholders cannot by law compel the distribution of dividends. They cannot by legal right claim the par or stated value of the stock while the corporation is in operation. The rights of the stockholders against the corporation are of an equitable, rather than of a legal, nature. Stocks are, therefore, often referred to as "equity securities" or simply as "equities."

The holders of bonds or other evidences of debt, on the other hand, have a right by law to enforce payment of both principal and interest. Interest must be paid regularly and the principal is due at a specified time. The rights of the creditors are, therefore, of a legal,

or nonequity, nature. Bonds are frequently referred to as "nonequity securities" or simply "nonequities." *

Uses of the word "capital." In referring to a balance sheet one frequently comes across the word "capital," used either alone or in combination of some kind, such as capitalization and capital structure.

The word "capital" is a "skin of many colors." It changes with the environment, background, and even with the mood of the user. It has a different meaning for almost every occasion. To the theoretical economist the term capital includes physical man-made instruments used for further production, such as tools, machinery, equipment, and business buildings. In this sense, capital would include not only the property, plant, and equipment but also inventory of operating parts and supplies and mine stripping and other costs applicable to future periods, excluding, of course, the portion that is pure land or gift of nature.† The terms "capital goods" or "producers goods" are often used as synonymous with capital in this economic sense.

Authorities in finance and investment rarely use the word "capital" in this economic sense. But even among financial writers capital is a word of many meanings. To some it means "business capital," or all the assets of a company. In this sense, the capital of the United States Steel Corporation at the end of 1946 would be $2,003,517,407. To others, capital is the excess of assets over the liabilities owed to outsiders: that is, it is the contribution made directly or indirectly by the stockholders. According to this interpretation, capital would include all the items under "capital and surplus" in the balance sheet plus the proprietary or surplus reserves.

Commercial bankers often refer to the "capital" of a bank as the total capital stock outstanding.‡ On the balance sheet of the United States Steel Corporation the use of the combined terms "stock and capital surplus" seems in effect and by implication to refer to capital as common and preferred stock. A common usage is reference to capi-

* In our computation of the common stockholders' equity for the purpose of determining book value per share of the common stock, we excluded the preferred stock particularly since it is nonparticipating.The preferred stock, however, must still be considered as an "equity security."

† Many of our present economists make no distinction between "land" and "capital" but use the term "capital" to include both. For an excellent discussion of the differences between capital and land see John Ise, *Economics*, Harper & Bros., 1946, p. 28-30.

‡ That is, common stock. Commercial banks normally do not issue preferred stock.

tal as the sum of the outstanding stocks and long-term debts or bonds.

In this volume we shall employ the word "capital" in various ways as usage seems to justify or demand, but we shall indicate in the context or by a footnote, if necessary, the exact sense in which it is intended. Little advantage would be gained here by attempting to use this term in a single, narrow sense. The term cannot be standardized.

Capitalization. Another balance sheet concept is "capitalization." This word is frequently used to mean the sum of the par value of the outstanding stocks and bonds. If the stock is of no-par value, it is customary to use instead the stated value assigned to such shares by the corporation. The stated value of the no-par common stock of the United States Steel Corporation is $75 per share. The "capitalization" of this corporation is, therefore, the long-term debt of $81,197,155 plus $1,013,025,000 of preferred and common stock, or a total of $1,094,222,155. Since the common stock has no par value, some authorities favor describing the capitalization of the company by merely saying a total of $441,478,255 of bonds and preferred stock and 8,703,252 shares of no-par value common stock, stated value $75.

There is no general agreement on the question as to whether to include surplus in the term "capitalization." There is much respectable opinion in favor of considering at least capital surplus as a part of capitalization, the argument being that such capital surplus is in effect a permanent contribution by the common stockholders. This would be true particularly if it had been created by the payment of a premium for the stock or if an adjustment of the number of shares or of the stated or par value had been made through the process of recapitalization. Unless otherwise indicated in the context, we shall use the word "capitalization" in the most commonly accepted way, namely the total face value of the bonds and stocks outstanding. If the common stock has no par value, the stated value is used.

Capital structure. Another related concept is "capital structure" or "capitalization structure," sometimes also called "financial structure." By this is meant the relative proportion of the total long-term funds obtained from the owners and from the long-term creditors. The contribution of the stockholders include not only the par or paid-in value but also the surplus items. In analyzing the capital structure it may be desirable to include preferred stock with the bonds. Bonds and preferred stock of the United States Steel Cor-

poration total $441,478,255 compared with $1,157,781,644 contributed by the common stock.* A "top-heavy" capital structure is one in which an unreasonably high proportion has been raised by bonds and preferred stock. The reasonableness of the proportion depends upon the nature and characteristics of the industry and many other conditions, both internal and external to the company, involved.

The next five chapters. The capital structure, to which we have just referred, constitutes one of the key topics of corporation finance. Its make-up is not generally the result of chance or whim. It may develop out of the interworking of numerous forces and circumstances. As to some of these the corporation may have a large amount of discretion; over others it may have little control. Some may even be imposed by law. The capital structure is not static: rather, it is often in a state of flux.

Capital structure logically forms the next subject of our analysis. In Chapter 9 we shall summarize the various conditions affecting and shaping it and in Chapters 10 to 13, the chief methods and processes by which it may be changed. Some of these adjustments may occur through the deliberate and voluntary policy of the company and at times even of its security holders. Others may be brought about by circumstances beyond the control of the management.

Summary. The basic financial statements are the balance sheet and the profit and loss reports. In this chapter we have analyzed the statements of the United States Steel Corporation.

One important difference between the balance sheet of the corporation and that of the partnership is the former's careful description of its capital. A sharp distinction must also be drawn between capital and the various surplus and reserve accounts. Though the partnership of Anthony, Barr & Cooper had built up a reserve for contingencies, it is rather unusual for a partnership to have such accounts. In the case of the corporation, however, such reserves are very common.

In our balance sheet and profit and loss statement we made certain analyses and computed certain ratios. We shall review some of the main points of our discussion by using a balance sheet and profit and loss statement with rounded figures.

We have the statements on page 138. For purposes of discussion we have given a letter to each of the accounts.

* The method of computing this was shown on page 131 of this chapter.

Balance Sheet for 1946

Assets		Liabilities	
a. Current assets...	$230,000	*f.* Current liabilities	$ 80,000
b. Net fixed assets, that is, less depreciation and obsolescence reserves	350,000	*g.* Bonds, 5%	50,000
c. Investments	50,000	*h.* Preferred stock, 6% (1000 shares par $100)	100,000
d. Intangible assets	150,000	*i.* Common stock (3000 shares par $100)	300,000
e. Deferred assets	10,000	*j.* Contingency and other surplus reserves	50,000
		k. Capital surplus	20,000
		l. Earned surplus	190,000
	$790,000		$790,000

Profit and Loss Statement for Year Ending Dec. 31, 1946

m. Net sales, that is, sales after discounts, returns, etc.	$1,000,000
n. Costs and expenses, including allowance for the year's depreciation	880,000
o. Operating profit	$ 120,000
p. Other income, including income from investments	5,000
q. Total income	$ 125,000
r. Interest on bonds	2,500
s. Net after interest	$ 122,500
t. Provision for federal and state income taxes	50,000
u. Net after income taxes	$ 72,500
v. Preferred dividends	6,000
w. Available for common stock	$ 66,500
x. Dividends on common stock, $8 per share	24,000
y. Transferred to earned surplus	$ 42,500

From these statements, the following computations can be worked out:

1. The capitalization. Items $g + h + i$.
2. The capital structure. The contribution of the bond and preferred stockholders is \$150,000, while that of the common stockholder is \$560,000, or, if we omit the contingency and other surplus reserves, \$510,000.
3. Book value of a share of common stock (simpler method):

$$\frac{i + j + k + l - d}{3000}.$$

4. Equity securities—these are h and i.
5. Nonequity securities—these are g.
6. Rate of return on total long-term investment

$$\frac{q - t \text{ (or } u + r)}{g + h + i + j + k + l - d}.$$

7. Rate of return on total long-term investment (another method)

$$\frac{o - t}{b + a - f}.$$

(Note that this makes use of the operating profit and subtracts all the federal taxes even those on the other income. This gives the rate of operating return. It would also be possible to use q instead of o in the numerator.)

8. Rate of return on stockholders' investment or on the total equity sometimes called net worth

$$\frac{u}{h + i + j + k + l - d}.$$

9. Rate of return on common stockholders' investment

$$\frac{w}{i + j + k + l - d}.$$

10. Times charges earned. Interest is the only such charge in our illustration; therefore, times charges earned really becomes times interest earned.

$$\frac{q - t}{r}.$$

11. Earnings per share of common stock

$$\frac{w}{3000}.$$

12. Earnings retained in the corporation—$42,500.

PROBLEMS

1. Partners in a solvent firm are free to withdraw their capital at any time with consent of all the partners. The stockholders of a corporation cannot do this. Their actions in withdrawing capital are generally subject to statutory control.

Why the difference?

2. A company has the following simple balance sheet:

Assets		Liabilities	
Total assets	$1,700,000	First mortgage bonds 4%	$ 200,000
		Preferred stock 6%, 4000 shares, par $100, voting (1 vote per share), nonparticipating, cumulative, noncallable......... ...	400,000
		Common stock, 5000 shares, par $100 (1 vote per share).....	500,000
		Surplus	600,000
		Total.	$1,700,000

The net income before interest on bonds but after provision for federal income taxes is $60,000.

a. What is the rate of return on the total investment? On the total stock investment—that is, on net worth? On the common stock equity? (There are no good-will or other intangible items among the assets.)

b. What is the book value per share of common stock? What would it be if the preferred had full participation rights to assets?

c. This company wishes to sell 2000 shares of additional common stock at $125 per share though the market price is $150. The question is: Should the pre-emptive right be given to the preferred stock (assuming the law and the contract to be silent on this matter)? What problem arises if you give the preferred holders the right to subscribe? What problem arises if you do not give them the right to subscribe?

3. Another company has this balance sheet:

ASSETS		LIABILITIES	
Current assets	$150,000	Current liabilities	$ 30,000
Net plant (after valuation reserves)	300,000	Bonds 5% (funded debt)	50,000
Other assets	20,000	Preferred stock 6%, 500 shares, par $100	50,000
		Common stock, 1500 shares, par $100	150,000
		Surplus	190,000
Total	$470,000	Total	$470,000

a. What is the current ratio—that is, ratio of current assets to current liabilities? (If current assets are $12 and current liabilities are $6, designate the ratio as 2 to 1.)

b. How, if at all, would each of the following affect the current ratio? Consider each one separately.

(1) Issuance and sale of $25,000 additional bonds at par for cash.

(2) Payment of the annual dividends on the preferred stock and a 5 percent dividend on the common stock.

(3) The "funding" of a $10,000 current debt—that is, the company issues bonds to obtain the money to pay off this current debt or it induces the creditor to accept bonds for it. (See Chapter 10 for more on this subject.)

(4) The purchase of $25,000 additional inventory on 30-day credit.

(5) The purchase with cash of a building valued at $10,000.

(6) The calling of the bonds at a call price of 105.

c. Develop some rules or principles to indicate how various types of transactions will affect the current ratio.

4. Financial statements of Bethlehem Steel Corporation:

CONSOLIDATED BALANCE SHEET, DECEMBER 31, 1946

ASSETS			LIABILITIES	
Current assets		$458,545,860	Current liabilities	$150,365,104
Investment and deferred receivables		12,277,837	Bonds (funded debt)	125,814,000
Fixed assets	$954,054,391		Other liabilities	6,556,068
Less· Reserves for depreciation	577,826,719		Contingent reserves	22,299,448
		376,227,672	Insurance reserves	11,000,000
Discount on sale of bonds		1,327,704	Vessel replacement reserves	12,628,406
Other assets		19,287,849	Cumulative preferred stock, 7%, $100 par	93,388,700
			Common stock, no-par 2,984,994 shares	283,574,430
			Surplus	162,040,766
Total assets		$867,666,922	Total liabilities	$867,666,922

The income for 1946 after provision for federal taxes but before interest and related fixed charges was $44,285,989. This included $11,000,000 transferred to income from contingent reserves to offset extraordinary costs of strikes. (Note that the United States Steel Corporation made the same kind of a transfer from reserve for additional costs from war.) The interest and related fixed charges were $2,554,058.

a. What is the book value of a share of common stock? (In the calculations for this and any other problems when the matter is significant, consider the discount on the sale of bonds an intangible item.)

b. What is the rate of return on the long-term investment? Calculate by both methods.

c. What is the rate of return on the stockholders' investment or total equity, sometimes called net worth?

d. What is the rate of return on the common stockholders' investment?

e. What is the times interest and other charges earned?

f. What are the earnings per share of common stock?

g. The dividends on the common stock were $6 per share. What was the amount of earnings retained?

5. In 1947 the United States Steel Corporation earned a net of $127,098,148 after all taxes and fixed charges. There was no change in shares outstanding. After preferred dividends, the company paid $5.25 on common. What was the earned surplus at the end of 1947?

Chapter 9

The Capital Structure

We have just seen that the term "capital structure" has reference to the relative proportion of the total long-term funds obtained from bonds and from stocks. Since preferred stocks are generally nonparticipating and have often been issued under conditions which make them virtually an obligation of the corporation in the mind of many investors, we shall classify them with bonds in our consideration of the capital structure.

The chief conditions and influences affecting the capital structure of a corporation will be considered under the following heads:

1. The operating ratio.
2. The steadiness of the corporate income.
3. The uses to which the company intends to put the funds.
4. The desire on the part of the management to trade on the equity.
5. The plans of the company as to the future.
6. The importance of flexibility and freedom of action.
7. The conditions of the money market.
8. Current or anticipated legislation and regulation.
9. Prevailing styles and fads.
10. The profitableness and the size of the business.

1. **The operating ratio.** By the operating ratio is meant the percentage of the gross receipts or revenues which a company uses up and spends as costs and operating expenses. These costs and expenses include cost of goods sold or disposed of, maintenance or repairs, insurance, interest on short-term debts, periodic allowances for depreciation and obsolescence, wages and salaries of all kinds, and taxes. They do not include interest on long-term debt or bonds.

If the gross revenues or receipts are $200, for example, and if these costs and expenses total $170, the operating ratio is 200 divided into 170, plus two zeros, or 85 percent, or, as it is generally expressed,

85) In other words, out of every $1 of gross revenue, 85¢ goes for such operating expenses and costs and only 15¢ is left over to pay the costs of capital, such as interest on bonds and dividends on preferred and common stock.

Analysts are not in full agreement as to the treatment to be given to net income taxes in a computation of this kind. Such taxes are not an expense as we ordinarily consider it. They are levied on the basis of net profits, which result after deductions and allowances have been made for all costs and expenses and for interest on long-term debt and bonds. But, since these net income taxes must actually be taken care of before payments can be made to the suppliers of permanent funds, a strong argument can be put up for including them, like property or transaction and gross income taxes, under expenses and costs. In utility rate making, regulatory commissions generally include net income taxes as a part of costs and expenses before computing the return on the investment by the bondholders and stockholders. Unless otherwise indicated in the context, we shall here consider taxes generally, including those on net income, as a part of costs and expenses for the purpose of computing the operating ratio.*

If we refer again to the figures for the United States Steel Corporation, we note that the total expenses and costs, in round numbers, include cost of sales and operating expenses of $1,207,000,000; general administration and selling expenses, $62,000,000; pension expenses, $9,000,000; provision for doubtful accounts, $1,000,000; taxes, other than income, $52,000,000; depreciation and depletion, $69,000,000. When the total of these items is divided by the sales and revenues of $1,486,000,000, the quotient, with two zeros added, or 94, gives the operating ratio by one method of calculation. The inclusion of income taxes under expenses and costs and the addition of other income to the revenues would give an operating ratio slightly above 95.

A high operating ratio, say 95 for an industrial corporation, means that a very large proportion of the "work" of the company is done by labor and by materials. Most of the activity pertains to buying, arranging, moving, making, transforming, selling, and servicing, and the wear and tear of goods and equipment. Conversely, the propor-

* We do not include interest on long-term notes and bonds as an operating expense, though it is a deduction for the federal income taxes. Interest on long-term securities is a cost of procuring capital rather than a cost and expense of operation, and, therefore, should not be included in the operating ratio.

tion of the total effort furnished by the suppliers of the fixed assets or plant in comparison to that made by the contributions of workers and goods is in such cases relatively small.

A low operating ratio, on the other hand, means that a relatively small proportion of the "work" is done by labor and materials and that a high proportion is done by the permanent assets. A number of illustrations will further explain these principles.

Assume the following situations:

	Company *A*	Company *B*	Company *C*	Company *D*
Gross income for the year ..	$100	$100	$100	$100
Operating expenses and costs for the year, including all taxes	94	58	70	46
Operating ratio	94	58	70	46
Amount available as return on investment—that is, as interest and dividends	6	42	30	54

Ninety-four percent of the income of Company *A* goes for expenses and operating costs of various kinds and only 6 percent goes for the investment—that is, mainly for the interest and rentals and dividends needed in order to obtain the capital to build the company into a living organization.

Capitalization of income. To determine the present value of the company as a working mechanism, we make use of what is called the *capitalization process.* If a company is operating an industrial plant or if it is a public utility possessing an indeterminate franchise—that is, one that continues as long as the company gives satisfactory service—we assume that the business will go on in perpetuity. In such case the present value of the company * is equal to the average annual expected return before payment of interest on long-term bonds or debts divided by the anticipated reasonable rate of return for the industry or for a company or industry involving similar prospects and risk. If the annual return, after the provision for

* We are here discussing the general subject of evaluation, not the specific problem of valuation of a utility for rate purposes. The capitalization process cannot be used to determine the value of a utility plant for rate-making purposes.

or payment of all costs and expenses including all taxes, is $10,000 and the probable or reasonable rate of interest or return is estimated to be 6 percent, the value of the company as a business is $10,000 divided by .06 or $166,666.67. Basically, the capitalization process consists of finding an answer to this question: What principal amount is necessary at, say 6 percent, to give an annual income of $10,000? If one turns the above figures around, it becomes evident that $166,666.67 invested at 6 percent will give almost exactly $10,000.*

If the rate of interest for Company *A* is considered as 6 percent, the present value of *A*'s business as a going concern is $100, that is, the amount available as a return, $6, divided by .06, or $100. Since the gross income is $100 and the value of the company's permanent assets is $100, the annual plant, or investment, turnover becomes $100 divided by $100 or one.† Rate of interest 6 percent, operating ratio 94 percent, plant turnover 1: this is a theoretical mathematical relationship.

The operating expenses and costs including all taxes of Company *D* are 46. There is thus a balance of $54 to cover return on the plant. If this balance is capitalized at 6 percent, that is, if $54 is divided

* There are two important variables in the process of capitalization: first, the average estimated future earnings after costs and expenses; second, the rate of interest. If the business is considered as having only a limited life, such as a bridge company with a franchise for thirty years, the problem is one of discounting rather than capitalizing. See Chapter 19 for the discounting process.

† The plant turnover is computed by dividing the gross revenues or receipts by the total value of the net fixed assets and the net current assets. Assume the following balance sheet:

Assets		Liabilities	
Fixed assets, after depreciation	$425	Bonds	$100
Current assets	100	Preferred stock	75
Intangible assets and assets not used directly in the business	25	Common stock, par total	200
		Surplus	150
		Current liabilities	25
	$550		$550

The permanent plant, or what is sometimes called investment, is the net fixed assets plus the net current assets. The net current assets, often called net working capital, are $100 minus $25, or $75. The plant then is $425 plus $75 or $500. This is really the value of the company. If the gross receipts are $1000, the plant turnover is $1000 divided by $500 or 2. Since the assets are valued at cost price and the sales or revenues are at the selling price, this method of computing plant turnover is a little illogical, but it is easily computed and is generally very convenient, especially for comparison over a period of time.

by .06, the theoretical value of the plant is $900. Since the gross income is $100, the plant turnover becomes $100 divided by $900 or one ninth per year. Using similar calculations, one finds the value of the plant of Company *B* to be $700 and of *C* to be $500, while the annual plant turnovers are respectively one seventh and one fifth.

Variations in rates of capitalization, as well as in earnings, will change the value of the plant or investment and will correspondingly affect the plant turnover. In the case of Company A, for instance, if the interest rate were 12 percent, the value of the plant would be $50 and the plant turnover would be two. If the interest rate were 3 percent, on the other hand, the value of the plant would be $200 and the plant turnover would be one half.

Relationship among operating ratio, plant, or investment value and capital structure. Since the interest and principal of long-time securities are basically paid from income available for interest and dividends, one must conclude that a company such as *D* can support a greater total of stocks and bonds than can Company *A*. The net income, after all expenses and taxes but before interest and dividends, for Company *D* is nine times as large as that of Company *A*. Furthermore, since bonds are often secured by a mortgage on the fixed assets,* one must conclude that Company *D* can support a greater par value of bonds than can Company *A*. The total capitalization, excluding surplus, of Company *A* might conceivably be $80. This would equal four fifths of the company value. Of this, certainly not more than an amount equal to one fifth of the plant value, or $20, should be bonds or preferred stock.† The common stock would then be $60. If the coupon and dividend rates on the bonds and preferred stock average 5 percent, ‡ the interest and preferred dividends will be $1. They will then be covered six times, and the amount available for the common stock of $60 will be $5, or 8.3 percent.

The total capitalization, excluding surplus, of Company *D* could conceivably be as high as $825, of which probably $500 could be bonds and preferred stock. If the bonds and preferred stock carry an average of 5 percent, the interest would be covered 2.16 times,

* Even if there is not a mortgage, the amount of bonds is compared by the analyst with the total of fixed assets.

† In our analysis, preferred stock is included with bonds since it has a fixed dividend rate and is often considered as a real obligation of the company.

‡ In practice, of course, the dividend rate on preferred stock will be higher than the interest rate on bonds of the same company, but since we are grouping bonds and preferred stock together in our illustration, we are assuming the average rate for the two types of securities together to be 5 percent.

leaving $29 for the common stock of $325 or 8.9 percent. The result for the four companies may be tabulated as follows:

	Company *A*	Company *B*	Company *C*	Company *D*
Gross income	$100	$100	$100	$100
Operating expenses and costs	$94	$58	$70	$46
Operating ratio	94%	58%	70%	46%
Available for fixed charges and dividends	$6	$42	$30	$54
Plant value or value of the investment	$100	$700	$500	$900
Plant turnover	1	$\frac{1}{7}$	$\frac{1}{5}$	$\frac{1}{9}$
Total capitalization	$80	$600	$450	$825
Bonds (and preferred stock)	$20	$350	$250	$500
Common stock	$60	$250	$200	$325

	Company *A*	Company *B*	Company *C*	Company *D*
Interest and preferred dividend requirements at 5 percent	$1.00	$17.50	$12.50	$25.00
Times interest and preferred dividends earned	6	2.4	2.4	2.16
Return on common stock	8.3%	9.8%	8.75%	8.9%
Proportion of bonds and preferred stock to plant or value of the investment	$\frac{1}{5}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{56}{100}$

The proportion of bonds and preferred stock to the plant is smallest in Company *A*. The "times interest and preferred dividends earned" is highest for Company *A*. Such facts do not mean, however, that the bonds of *A* are superior to those of the other companies. A reduction of 6 percent in the gross income of *A*, accompanied by no drop in the expenses and costs, would completely wipe out the coverage on the bond interest. A 7 percent increase in the expenses and costs, with no rise in its gross income, would have the same result.

Similar percentage changes for companies *B*, *C*, and *D* would be serious, but probably would not be fatal to the standing of either the bonds or the stocks.

(The general relationship among operating ratio, plant value, and the capital structure can be summarized as follows: the lower the operating ratio, the larger will be the plant value and the total capitalization relative to gross revenues or receipts, and the greater will be the proportion of fixed-rate securities to common stock. Conversely, the higher the operating ratio, the lower will be the plant value and the total capitalization in relation to gross revenues or receipts, and the smaller will be the amount of fixed-rate securities compared with the common stock.)

You will long ago have concluded that the companies with which we have dealt are representative of widely different forms of activity. *A* is a manufacturing and selling company, *B* a hydroelectric corporation, *C* a railroad, and *D* a water works.

The differences among these groups of enterprises are fundamental. Refer again to Company *D*. The bulk of the assets of a water company consists of its pumping equipment, reservoirs, and the miles and miles of underground pipes leading to all parts of the city. Most of the "work" is done by the plant. Comparatively little is done by labor. There is even very little depreciation. The pipes may last a hundred years or more and may require little maintenance expense. Little advertising or promotional expense is necessary. The customer turns on the faucet, and sets into motion the entire hidden and silent process, which responds quickly and automatically. The pipes come directly to the customer. The investment of a water company in plant must be large compared with the operating revenues. (The plant turnover is, therefore, low.)

Compare *D* with *C*, a railroad company. This company has to operate trains, handle freight, accommodate passengers, solicit business, spend much on maintenance and repairs, and allow huge amounts for depreciation. A greater expenditure for labor and materials is needed to bring in a dollar of railroad revenue than a dollar of water revenue. Consequently, the operating ratio of a railroad company is higher than that of the water works. (The plant turnover is also larger.)

(The operating ratio of a hydroelectric company, *B*, is generally higher than that of a water works but lower than that of a railroad.) The hydroelectric enterprise requires a huge investment in dams. Water, through the force of gravity, does a great amount of the

"work." Such a company may use more materials and labor per dollar of gross revenue than do water companies, particularly if they have auxiliary steam plants, but it relies less upon labor and materials than does the typical railroad. The steam electric company, in contrast, invests less money relatively in plant than does the hydroelectric organization, but it must spend more for the generating of current, thus raising its operating costs and expenses. This higher operating ratio does not mean that the steam company is less "efficient" than the hydroelectric company. The differences in the operating statistics and in the financial set-up reflect a basic distinction between the physical processes of the two types of enterprise.

Because of the numerous kinds of industrial products and processes, the operating ratios for manufacturing companies have little analytical significance. The exact figure depends on the type of business. In a merchandising organization the operating ratio is very high. It will have a small plant value compared with sales and the plant turnover may sometimes run even above ten. Having relatively few fixed assets as a basis for secured bond issues, such company will raise most of its externally obtained funds by the sale of common stock, with a scattering of preferred stock. Companies producing heavy capital goods, such as locomotives and pumping machinery, or those engaged in deep mining and ore or oil refining, will naturally tend to have less rapid rates of plant turnover than the producers or assemblers of lighter goods and equipment.*

In consulting financial analyses of companies and literature on this subject, the reader will come across several ways of computing the operating ratio. Some analysts include under "costs and operating expenses" only the expenses and costs in a narrow sense, such as wages and salaries of operating personnel, costs of materials and supplies used, costs of coal and other sources of power, interest on short-term loans, and all taxes except those on net income. They do not include depreciation allowances or perhaps not even maintenance expenses. Other writers expand the concept of costs and expenses to include depreciation and obsolescence and maintenance. Still others include also all taxes on net income, both federal and state. In this treatment we have used the term in the last-mentioned way, on the theory that basically before there is anything available for the suppliers of long-term funds, whether they are furnished by bondholders or stockholders, all expenses and costs, including depreciation and all taxes, must be allowed or paid. In the figures for

* For comparison of the relationships in various industries, see Appendix E.

those specific companies cited in the problems for this chapter and for various industries as given in the Appendixes, the reader will find the cost and expense data broken down so that he can compute the operating ratio in one or more ways.

2. **The steadiness of the corporate income.** The soundness of a corporation's capital structure depends, in the final analysis, upon the steadiness and continuity of the company's income.

Let us again refer to Companies *A* and *C*.

	Company *A*	Company *C*
Gross operating income	$100	$100
Operating expenses	$94	$70
Operating ratio	94%	70%
Available for fixed charges and dividends	$6	$30
Plant value	$100	$500
Bonds (and preferred stock)	$20	$250
Stock	$60	$200
Interest (and preferred dividend) requirements (5%)	$1	$12.50
Times interest and preferred dividend earned	6	2.4

In Company *A*, the bonds are only one fifth of plant, in *C* they are one half of plant. Bond interest (including preferred dividends) is covered 6 times by *A* and 2.4 times by *C*. If the average gross operating income of each plant falls by 15 percent while the operating costs decline by only 10 percent, the figures will become:

	Company *A*	Company *C*
Gross operating income	$85	$85
Operating expenses	$84.60	$63
Operating ratio	99%	74%
Available for fixed charges and dividends	40¢	$22
Bonds outstanding (and preferred dividends)	$20	$250
Interest and preferred dividend requirements	$1	$12.50
Times interest and preferred dividend earned	.4	1.76

Company *A* now earns only 40 percent of its interest and preferred dividends, leaving a deficit for the common stock. The charges for *C* are still more than earned, but the return available for the common stock has fallen to 4.75 percent. These figures show what could theoretically happen, but both companies may attempt to preserve their position by means of advertising and selling campaigns and by initiating improvements and economies in operation.

Fundamental technological innovations or basic changes in human wants may make the problem of adaptation more difficult for a utility or railroad than for the average industrial company. Converting a railroad system into an air transport company would involve more loss and expense than the changing over of the American Locomotive Company into the making of airplanes. It might be a more expensive process to convert a hydroelectric plant into an atomic power plant than it would be to convert a meat-packing plant into a sugar refinery.

3. The uses to which the company intends to put the funds. The nature and type of the security offered in exchange for new funds must depend to some extent upon the purpose for which the new money is intended. Three common reasons for new funds are: (*a*) payment of debts and redemption of outstanding securities; (*b*) expansion of the plant; and (*c*) increase of working capital.

Heinz Company as illustration. The recently announced financing by H. J. Heinz Company will illustrate these. The balance sheet of this company as of April 30, 1946, in condensed form, appears on the opposite page.

This company late in 1946 announced the forthcoming issuance and sale to the public of 100,000 shares of 3.65 percent cumulative preferred stock, of a par value of $100, and 200,000 shares of new $25-par common stock. The net proceeds of these shares to the company, after all expenses and banking commissions, amounted to $17,680,350.*

H. J. Heinz Company planned to use the net proceeds, first, to redeem or call the oustanding 4-percent cumulative preferred stock. Since the call price was 103, the amount required for this purpose

* The price to the public of the preferred stock was $102.75 and of the common stock $41.00. The banking commissions and selling fees were $2.25 per share for the preferred and $2.20 for the common. The proceeds thus were $10,050,000 for the preferred stock and $7,760,000 for the common stock, or a total of $17,810,000. After the deduction of certain local company expenses in connection with the issue, the net proceeds were computed to be $17,680,350.

Assets		Liabilities and Capital		
Current assets.......	$36,248,986	Current liabilities....		$12,107,955
Investments....... ..	7,880,023	Other liabilities......		1,899,331
Fixed assets after depreciation	20,736,438	Reserves, including $3,000,000 for contingencies.........		4,937,703
Prepaid expenses and deferred charges ..	896,535	Preferred stock, 4% cumulative, 50,000 shares, par $100, callable at 103.....		5,000,000
Other assets	524,370	Common stock, 360,000 shares, par $100 ...	$36,000,000	
		Less: 57,734 shares in treasury ...	5,773,400	
				30,226,600
		Earned surplus		12,114,763
Total assets....	$66,286,352	Total....		$66,286,352

was 50,000 times $103, or $5,150,000. Then, the company proposed to add the remainder of the funds to its working capital, leaving part in cash for a while, or expending part in augmenting inventory or in paying off current debts. Eventually the company would purchase equipment and plant. Thus, it will be noted, the company planned to use these proceeds for all the purposes for which new funds can generally be used.

But, you will ask, how can the company have two kinds of common stock outstanding: the old par of $100 and the new par of $25? The answer to this question lies in the fact that the company planned at the same time to rearrange its capital stock. On the April 30, 1946, balance sheet we noted that 360,000 shares of $100 par stock had been issued, of which 57,734 were held in the treasury, the total outstanding shares thus being 302,266. The company announced plans to give four shares of $25-par common stock to the old common stockholders in exchange for each $100 par share. These old stockholders were thus to be given 302,266 × 4 shares or a total of 1,-209,064 shares of new $25-par stock in exchange for their old hold-

ings. At the same time, of course, the common shares held in the treasury would be quadrupled to 230,936.*

Bearing in mind that 100,000 shares of new preferred stock and 200,000 shares of common stock were to be sold to the public, that the old preferred was to be called, and that the adjustments just mentioned were to be made in the common stock, we find that the capital structure before and after this new financing appeared as follows:

Shares	April 30, 1946	After new financing
Cumulative preferred stock ($100-par value).....	50,000	None
3.65% cumulative preferred stock ($100-par value)	None	100,000
Common stock ($100-par value)......	302,266	None
Common stock ($25-par value).......	None	1,409,064 *

* This figure is arrived at by adding the 200,000 newly issued shares to the 1,209,064 shares given to the old common stockholders in exchange for their 302,266 old shares.

Reverting to the uses to which funds may be put—payment of debt and calling of outstanding securities, expansion of plant or fixed assets, and increase of working capital—it is safe to conclude that the funds for redeeming securities or paying debts should be obtained from the issuance of new securities carrying a lower capital cost or from retained earnings of the corporation. Generally it would not be wise to borrow on a short-term note to redeem a long-term security, though there may be special circumstances where this is to be recommended. Expansion of plant or fixed assets should as a rule be financed through the issuance of long-term bonds or stocks or through the retention and reinvestment of earnings. As the fixed assets of industrial companies increase in relation to current assets, managements tend to raise more of the funds from long-term securities, though these will not necessarily be bonds. Under normal circumstances no company would construct an addition to its plant by means of money raised through short-term notes or commercial loans.

* This process is a form of recapitalization, which will be discussed at length in Chapter 12.

Sources of working capital. By the term "working capital" is meant the cash, inventories, short-term receivables, and investments which are readily salable and intended to be sold on a moment's notice. The items included in working capital may be said to be generally used only once in contrast with the steady and repetitive use of the fixed plant. If the inventories are finished products, they are being changed continually into cash or receivables. If they are raw materials, they are steadily passing into the semifinished or the finished product state. If the working capital items are receivables or readily salable investments, they are "used up" by being converted into cash. If they are cash, they may, by a single transaction, be changed into inventories or into some other asset or may be used to pay off debts or to pay dividends. In the typical balance sheet, the "current assets" * constitute the working capital.†

(Working capital may be raised in five general ways: (1) by the reinvestment of earnings, (2) by the sale of bonds, (3) by the sale of stock, (4) by the incurring of short-term debts and trade liabilities, (5) by the sale of buildings and other fixed or permanent investments for cash. ‡

* The "current assets" of H. J. Heinz Company include cash in banks and on hand, U. S. government obligations at cost, accounts receivable, finished goods, work in process, raw materials and supplies, claims against U. S. Commodity Credit Corporation for subsidies. It will be recalled that this maker of "57 varieties" uses many agricultural products.

† Financiers and accountants also define the term "working capital" as the current assets *minus* the current liabilities, that is, minus accounts and short-term notes payable, taxes estimated and soon to fall due, and long-term bonds maturing during the year. In this sense, the working capital of our corporation is $36,248,986 minus the current liabilities of $12,107,955. This concept might rather be described as *net working capital.* If this distinction is made, the term current assets alone, without the subtraction, may be referred to as *gross working capital.*

Economists generally use the term "working capital" in the sense of *"circulating capital,"* that is, the inventories owned by a company, whether in the finished, partly finished, or raw material state. As Professor Hicks points out, this concept does not differ substantially from the accounting and financial use of the term. After all, from the broad social point of view, all receivables are someone else's payables, even cash being payable by someone, namely the government. Thus, in a broad social sense, all these receivables and payables cancel out, leaving only the inventories as working capital. See J. R. Hicks and A. G. Hart, *The Social Framework of the American Economy* (Amer. ed.), Oxford University Press, 1945, pp. 107-08.

‡ If working capital is considered as the difference between the current assets and the current liabilities, it is obvious that borrowing on short-term loans or by trade credit does not increase this net working capital. Such increase simply adds the same amount to both sides, leaving the balance unchanged. However, it generally affects the ratio of current assets to current liabilities.

The fifth method is not a normal and regular way and will not be discussed further. If the additional current assets are to be part of the regular normal or permanent flow of working capital, they may logically be raised by the sale of long-term securities and by the reinvestment of earnings. The question as to the choice between bonds and stocks raises a strong presumption in favor of stock. A company possessing a respectable credit rating would hesitate to burden itself with a long-term debt and fixed charges in order to obtain assets which, in the normal course of business, are to be converted into other forms of property or sold, even though their total value remains more or less steady.

If the additional funds are needed for temporary purposes, they will often be raised by short-term loans and trade credit, which amounts to buying on account. A company requiring a very large working capital, either permanent or temporary, relative to the value of the plant, will have few bonds outstanding. This is just another way of stating our principle: a company with a high operating ratio and requiring much working capital and a large labor force will have a capital structure consisting entirely, or almost entirely, of capital stock.

4. The desire on the part of management to trade on the equity. A Greek scientist is said to have remarked that if he had a place to stand he could move the earth. The principle of the lever is important in corporation finance, as well as in physics and mechanics. Ambitious promoters and managements have frequently attempted to control the maximum of assets with the minimum of investment. They have also been interested in increasing the return on their own common stock as much as possible. The device used for these purposes has been called somewhat illogically, but by common usage, *trading on the equity.*

Corporation *M*, Corporation *N*, and Corporation *O* each have a capitalization of $6,000,000, plus surplus of $2,000,000. *M* has outstanding $6,000,000, in common stock but no preferred stock and bonds. *N* has outstanding $5,000,000 in 5-percent bonds and $1,000,000 in common stock. *O* has outstanding $3,000,000 in 5-percent bonds, $1,000,000 in 6-percent nonparticipating preferred stock and $2,000,000 in common stock.

Assume now that each company experiences the following in three consecutive years:

1945—Gross income of $1,000,000, operating costs and expenses (including all taxes) of $700,000, leaving a balance of $300,000 before interest and dividends.

1946—Gross income of $775,000, operating costs and expenses (including all taxes) of $675,000, leaving a balance of $100,000.

1947—Gross income of $1,300,000, operating costs and expenses (including all taxes) of $800,000, leaving a balance of $500,000.

These conditions and the returns for each corporation on each group of securities are set forth in the following tables:

	1945	1946	1947
Gross income	$1,000,000	$775,000	$1,300,000
Operating expenses and costs	700,000	675,000	800,000
Balance for interest and dividends	300,000	100,000	500,000

Corporation *M*	1945	1946	1947
Bond interest	. . .	. .	.
Preferred dividends	.	. . . . .	. . .
Earnings available for common stock	$300,000	$100,000	$500,000
Percent earned on common stock of $6,000,000	5	1.67	8.3

Corporation *N*	1945	1946	1947
Bond interest	$250,000	$250,000 (*Deficit* of $150,000)	$250,000
Preferred dividends	....	....	....
Earnings available for common stock	50,000	*Deficit*	250,000
Percent earned on common stock of $1,000,000	5	*Deficit*	25

Corporation *O*	1945	1946	1947
Bond interest	$150,000	$150,000 (*Deficit* of $50,000)	$150,000
Preferred dividends	60,000	*Deficit*	60,000
Earnings available for common stock	90,000	*Deficit*	290,000
Percent earned on common stock of $2,000,000	4.5	*Deficit*	14.5

Company *M*, with only common stock outstanding, earned a comparatively small percentage on its common stock in all three years, but it never incurred a deficit. At the other extreme, *N* has outstanding $5,000,000 in bonds and only $1,000,000 in common stock. This company earned 5 percent on its common in 1945, incurred a deficit in 1946, but netted a tremendous rate on its common in 1947. Corporation *O* is in an intermediate position with $3,000,000 in bonds, $1,000,000 in preferred stock, and $2,000,000 in common stock. The return on its common stock does not fall so low nor does it rise as high as that for Company *N*.

By trading on the equity is meant the issuance and use of fixed or limited-return securities (including bonds, nonparticipating preferred stock, and contractual arrangements such as leases) as a lever in order to increase the rate of return on the residual common stock. If the average return on the total capitalization is greater than the percentage going to these fixed or limited-rate securities, the return on the common stock will be magnified. If the average return on the entire capitalization is smaller than the rate paid to the bonds or preferred stock, however, the earnings on the common stock will be minimized.

Refer, for instance, to Corporation *M*, which is doing no trading on the equity. If its earnings are $300,000, the return on the capitalization of $6,000,000 is 5 percent. If its net is increased by 100 percent, that is from $300,000 to $600,000, the return on the total capitalization of $6,000,000 is also doubled, that is, raised from 5 percent to 10 percent. Similarly, if the net falls from $300,000 to $150,000, the return on the total capitalization or common stock is reduced from 5 percent to 2.5 percent. Since there are no limited or fixed return securities ahead of the common stock, the rate of

return on the common will fluctuate exactly with the amount of net income.

Contrast these results with those for Company *N*. If the balance for interest and dividends is $300,000, the average return on the total capitalization of $6,000,000—stocks and bonds—is 5 percent. If, instead, the balance available for interest and dividends becomes greater than the interest rate on the bonds, say it becomes $420,000, or 7 percent on the total capitalization of $6,000,000, the return on the common stock becomes 17 percent. If the return on the total becomes 4.5 percent—that is, less than the interest rate on the bonds—or $270,000 in all, the balance for the common becomes only $20,000 or 2 percent. The return on the common stock of Company *N* fluctuates more widely than does the return on the total capitalization.

The common stock of corporations engaged in a high degree of trading on the equity is appropriately called leverage stock, or, as the English sometimes put it, gearage stock. The common stock of a company doing little or no trading on the equity is referred to as nonleverage, or nongearage stock.*

The purchase of high leverage stocks may, however, be a treacherous thing for the investor. If earnings are so accommodating as to rise or to remain relatively high, he gleefully accepts the results of his skillful selection. If the income suffers a relapse, however, he will be rudely jolted into an appreciation that the lever works in both directions.

Since residual-income securities—that is, common stock—often have the sole or predominant vote in a corporation, trading on the equity permits financiers to acquire control of a large amount of assets by means of a relatively small investment. The holders of leverage stock are generally not eager, therefore, to admit strangers

* The market price of a leverage stock is likely to fluctuate more widely than that of a nonleverage stock. In some respects the purchase of a leverage common stock resembles buying on the margin—that is, the buying of stock with only a part payment, the purchaser borrowing the balance of the price from the broker. When the Board of Governors of the Federal Reserve System, pursuant to the authority granted to it by the Securities Exchange Act of 1934, raised the down-payment requirement on securities until it became 100 percent in January 1946, one of the effects seems to have been to turn investors and speculators into the purchase of leverage shares, particularly of certain investment companies. See Lucile Tomlinson, "Records of 25 Closed-end Investment Companies," *Barron's*, March 4, 1946, p. 7. The Board of Governors in January 1947 reduced the down-payment requirement for registered securities on the exchange to 75 percent. See also Chapter 24.

into the inner sanctum. Public-utility operating companies, whose common stock is often controlled by holding organizations, have comparatively rarely issued new common stock. The dominant stockholder—that is, the holding or parent company—has encouraged trading on the equity by its subsidiaries so as to keep control and the right to dividends within a narrow circle. When these operating companies have raised new funds from the outside, they have often done so by the sale of bonds or of nonvoting and nonparticipating preferred stock.*

5. Plans of the company as to the future. Plans as to the future expansion have a powerful influence upon the capital structure. If a young and small company issued bonds and preferred stock as well as common stock, it might find itself strait jacketed in the financing of future expansion. The protective provisions of the preferred stock and bonds may handicap, or even prevent, the issuance of additional equally rating preferred stock and bonds. It might be next to impossible to issue any securities with rights prior to those already outstanding. Even though such bonds and preferred stock contracts contain the call feature, the young company probably cannot afford to expend its funds in exercising this privilege but may prefer to use them for further development.

Any corporation engaged in a rapidly growing and dynamic industry may wish to be free to expand rapidly. Such a company will probably begin with a simple capital structure, perhaps only common stock, additional amounts of which may be sold as the need for funds arises. Expansion plans may necessitate the keeping of a large amount of available liquid assets, which, by their very nature and temporary use might not generate enough income to pay immediate legal interest claims. A company may "hold back" on its stockholders but it cannot easily put off the legal rights of its bondholders.

6. Importance of flexibility and freedom of action. A company having a capital structure of only common stocks may possess flexibility of price policy and be more independent in the financial markets. Such company can more readily adjust its prices in response to external business conditions. It can take chances and make operating and financial changes which it might not dare even to

* Nonvoting common stock was once rather popular for the purpose of concentrating such control, but it is now frowned upon by both government regulating authorities and the stock exchanges.

consider if there were numerous bondholders clamoring for interest. A company or industry with a capital structure top-heavy with bonds may run into difficulties in times of great technological advance or in times when consumers' habits are shifting greatly. Many American railroads, burdened with heavy interest charges, were unwilling, or unable, to make appropriate adjustments when improved equipment was developed or when truck and airplane competition resulted in loss in operating revenues. Public-utility companies have frequently been warned that they have outstanding bonds in such large quantities as to create an impression that they consider important technological developments improbable or changes in popular demand outside the realm of possibility.

A company which has a capital structure largely of stock is free to raise additional money by mortgages. Such additional funds might be extremely difficult to obtain if mortgage bonds, or even only debenture bonds, are already outstanding in large numbers, especially if there are restrictions on future borrowing.

7. Conditions of the money market. In times of low interest and money rates, the rate of return, or yield, on good bonds is likely to be low, that is, their price will be relatively high.* Such conditions tend to favor the issue of bonds, particularly if the long-time or secular trend of the company's business seems to be upward.

The prevalence of low interest rates will also stimulate refunding (discussed further in Chapter 10)—that is, the calling of bonds carrying a high coupon (interest) rate or the calling of preferred stock with a high dividend rate and substituting for them securities carrying a lower interest or dividend rate. This substitution is accomplished either by the direct exchange with the old holder of a new lower-interest or smaller-dividend security for the old or by the sale of such new securities on the market and the use of the funds

* This is another way of saying that the cost to the company of new borrowed money will be low. If a corporation proposes to issue bonds carrying a coupon rate of 4 percent at a time when the general market rate for the same type of risk is 5 percent, either it will have to sell the bond at a price below par in order to permit the investor to earn about 5 percent on his investment, or, if the corporation wishes the bond to sell at around par, it will have to substitute a higher coupon rate. In other words, the "cost" of the new money to the corporation will be about 5 percent. On the other hand, if the current market rate for a similar risk were only 3 percent, the company could dispose of a 4 percent bond at a price considerably higher than par. To sell at or near par, such bond would then have to carry a coupon rate of 3 percent. For further discussion of the mathematics of bond investments, see Chapter 19.

so received to pay off the old holders. In the H. J. Heinz Company financing referred to earlier in this chapter it will be recalled that the second method was used. Such "refunding" was one of the outstanding characteristics of the financial markets from 1935 to 1945 or 1946. Many companies have refunded twice and some three times during this period.* Through the refunding process, companies have been able in effect to get more money with the same amount of bonds or the same amount of money with fewer bonds, the result being an improvement in their capital structures, "improvement" here meaning a reduction in the proportion of bonds and preferred stock to the total long-time and permanent securities outstanding.

During stock-market booms the yield or return on common stock may be even lower than that on bonds of the same company. This was frequently the case during the stock-market boom of 1928-29. Some companies, such as United States Steel Corporation and Anaconda Copper Mining Company, sold common stock and used the money so obtained to pay off their bonds at a call figure which was very low compared to the price received for the stock. In many cases the funds so acquired were more than enough to retire the bonds, and the companies used the balance to build up their cash and other liquid accounts. This explains why many industrial corporations, following the stock-market crashes of 1929-32, were in a highly liquid condition and presented capital structures containing comparatively few bonds.

To illustrate this practice and its effect: A corporation had the following balance sheet:

* Among the important forces or conditions working against much of a rise from the current low level of interest rates are: (1) The United States government will exercise great pressure to keep rates low in order to minimize the interest charges on the United States debt. (2) The commercial banks will not favor substantial rises in the current interest rates, since such increases would tend to lower the market value of their holdings of long-term United States bonds. This might be a threat to the solvency of these banks unless the Federal Reserve banks took the bonds off their hands at or near the book value. (3) The banks are making substantial profits even with our present low interest rates. They have reduced the interest on savings accounts and, by law, are forbidden to pay interest on demand deposits. They hold such vast quantities of United States bonds and their deposits have risen so greatly in relation to their capital stock and surplus that the large volume of investment at low interest still gives a substantial return on their capital stock. (4) Private lenders could not effectively raise their lending rates even if they wanted to. The United States government, through its loan agencies already established or started for the purpose, could easily smash any such attempt to raise rates.

Assets		Liabilities	
Current assets	$ 45,000	Current liabilities	$ 20,000
Fixed assets	75,000	Bonds, 5 percent (callable at 105)	25,000
		Common stock, 300 shares, par $100	30,000
		Surplus	45,000
	$120,000		$120,000

The earnings of the company, let us say, are $7250 before interest and dividends. After paying interest, the company has a balance of $6000, which is equal to $20 per share of common stock. In a stock-market boom period, its stock might easily sell for as much as fifteen times earnings or $300 per share.

The company now offers 130 new shares of common stock at $250. This financing brings in cash to the amount of $32,500, which is sufficient to call or redeem the bonds, a process which requires $26,250 (that is, $25,000 times 105), and to add $6250 to the working capital of the company. If one ignores the costs of accomplishing this financing, the transaction makes the *pro forma* balance sheet * as follows:

Assets		Liabilities	
Current Assets	$ 51,250	Current liabilities	$ 20,000
Fixed assets	75,000	Stock (430 shares)	43,000
		Surplus	63,250 *
	$126,250		$126,250

* The premium on the stock is $150 per share or a total of 130 × $150 equals $19,500. The bonus of 5 percent (call price $105) given to the bondholders was $25,000 × 5 percent or $1250. This $1250 represents a subtraction from surplus. The increase in surplus due to this transaction was $19,500, the decrease was $1250, a net increase of $18,250.

The book value of a share is now $247.09 instead of $250, as before, but the capital structure is changed, and the working capital

* By a "*pro forma* balance sheet" is meant a balance sheet giving effect to certain assumed transactions, such as new financing, with no other operational changes taking place in the meantime.

position, incidentally, has been improved. The company also has even greater flexibility and freedom of action than before, a fact which may in the long run be of considerable advantage to the stockholders.

8. Current or anticipated legislation and regulation. Federal tax laws permit a corporation to deduct business costs from its gross income before arriving at the net income subject to taxation. Dividends on common and preferred stock do not constitute a business cost, but interest on bonds is deductible. Sometimes corporations have issued securities with enough of the characteristics of stock to make the payment of interest voluntary and enough of the features of bonds to enable the corporation to deduct the interest as an expense. The income bond—a bond on which interest is required to be paid only if it is earned during the year—is an illustration of this type of security. The Bureau of Internal Revenue scrutinizes income bonds carefully. It permits the interest to be deducted as a business cost if the bond was issued in the course of a financial reorganization. The Bureau does not allow the interest on such a bond to be deducted by the corporation debtor if it was issued by a fully functioning corporation under ordinary circumstances as a method of raising its usual amount of funds.

Regulatory agencies also influence the capital structure of corporations under their jurisdiction. The Public Utility Holding Company Act of 1935 prescribes certain qualitative standards for securities to be issued by members of utility holding company systems. The Securities and Exchange Commission, charged with the enforcement of various provisions of this Act, has emphasized the requirement that security issues must be reasonably adapted to the earning power of the issuing company, that no security shall be issued—whether for new funds or for refinancing purposes *—unless there is a reasonable probability that the required interest and dividends will be adequately covered.

* At first the Commission was more lenient in the case of refunding or refinancing issues than in the case of issues for new money. In *In the Matter of El Paso Electric Co.*, Holding Company Act Release No. 2535, February 4, 1941, the Commission reversed itself in the following words: "It would be small consolation to investors, consumers, and the general public to be told that top-heavy capital structures were not *created* under the Commission administration of the Holding Company Act, but were only *perpetuated* under it because of hesitancy on the Commission's part to act." (Italics are the Commission's.)

The work and attitude of the Commission are summarized in part by the following extract from its *Tenth Annual Report:* *

A major objective of the Commission's regulation of security issues has been to achieve a balanced capital structure with a substantial amount of common stock equity. A balanced capital structure provides a considerable measure of insurance against bankruptcy, enables the utility to raise new money most economically, and avoids the possibility of deterioration in service to consumers if there is a decline in earnings. Since, by and large, the utility industry has been characterized by an excessive amount of debt and other senior securities, the Commission's regulatory efforts under Sections 6 (b) and 7 have been in considerable part devoted to reduction of these senior securities and the increase of the common stock equity. In some instances, conditions have been attached requiring that the interest savings from refunding or a certain amount of net earnings be reserved to redeem outstanding debt. In other instances, the Commission has required the inclusion of sinking fund provisions whereby the issuer agrees to devote annually a stated amount to retirement of bonds or to property additions. In still other instances, the objective of debt reduction has been achieved by financing through the issuance of securities with short-term serial maturities.

The Commission has also attempted to increase the common stock equity. In various early decisions and reports it pointed out that a time of low interest rates may make it advantageous to issue common stock as well as bonds. When the Indianapolis Power and Light Company in 1940 successfully floated an issue of common stock, the Commission pointed out that at least one half of the public utility companies in the country were in fully as good a financial condition as that company and that they also could issue common stock under similar or even better terms. The Commission, early in its administration of the capital structure phases of the Public Utility Holding Company Act, tentatively suggested that the outstanding bonds of a public utility operating company should not exceed 50 percent of the net plant value, that is, the value after depreciation. It also required that "water" be squeezed out of the assets when such evaluation was made. From 1935 to 1942 the operating subsidiaries of registered holding companies wrote down their property accounts by more than a half billion dollars, a process that has continued at an accelerated rate in the last few years through the cooperation of the Securities and Exchange Commission with the

* For the fiscal year ended June 30, 1944, p. 99. This *Report* contains a Ten-year Survey of the Commission's work—1934 to 1944.

Federal Power Commission and the regulatory agencies of various states.

The Securities and Exchange Commission has also taken direct action to increase common-stock equities. Sometimes it has refused applications to issue bonds and has strongly urged that the applying company issue common stocks instead. Often it has insisted, as a condition for further financing, that a holding company purchase additional stock in the subsidiaries which under the law would probably continue under their control. When a holding company owned open accounts or bonds or preferred stock in a subsidiary which wished to do some financing, the Commission has, at times, insisted that these be canceled and that the holding company accept common stock in their place. Frequently the Commission has restricted the dividend-paying discretion of holding or operating companies by requiring the building up of certain reserves, the preservation of working capital, or the maintenance of the financial integrity of the company. In so far as such restrictions prevent the distribution of all the earnings they help to build up the common-stock equity.

Obstacles in the way of reducing the proportion of bonds in the capital structure have been: (1) the low interest rates at which corporations can float bonds; (2) the consequent emphasis upon refinancing, in the regulation of which the Commission was at first much more lenient than in the issue of bonds for new money; (3) the tendency on the part of utility managements to continue the practice of trading on the equity; (4) the fact that federal tax laws permit no deduction for dividends paid on stock while they do, of course, permit a deduction for interest on bonds and notes; (5) the fact that many large institutional investors, such as life insurance companies, are not permitted, as a general rule, to buy or hold common stocks. (See Chapters 25 and 26.)

Another influence under the auspices of government is the process of reorganization, the usual primary purpose of which is to reduce bonded indebtedness and corresponding fixed charges. But we shall come to that in Chapter 13.

9. **Prevailing styles and fads.** As in other phases of life, styles and fads exercise considerable influence on capital structures. Sometimes the common stock is the vogue; other times, the bond; sometimes the investor smiles on a hybrid, such as the preferred stock. We have already seen how the idea of two kinds of stock—an ordinary

and a preferred—stimulated the imagination of financiers, first, in the latter part of the nineteenth century, as a substitute for bonds, thus reducing the fixed charges of weak railroads, then, in the twentieth century, as a method of raising permanent capital.

In the lamented 1920's the "common stock as a long-term investment" stimulated the cupidity of Main Street, as well as Wall Street. Many people considered stock stock, and when common stock rose to dizzy heights they avidly grasped for the preferred share. Managements of corporations responded to this demand.* Public utility-operating companies fed this form of security to their customers.†

During the 1930's and early 1940's the preferred stock continued in wide use, but the enthusiasm for it has moderated. It has been learned that if the preferred stock of a company is sound the common stock and the bonds are also of high quality, that if the bonds and common stock are inferior the preferred stock is also bad. The earnings and standing and integrity of the issuing company, not the precise terms of a security contract, are the important determinant of investment values. As a hybrid, the preferred stock has often been found by the investor to have the disadvantages of a stock with few of its advantages and the disadvantages of a bond with few of its advantages. As a prior-claim security, preferred stock cannot ordinarily share in extra earnings, but as a stock, it can enforce no legal claim. Thus, in good times a preferred stockholder receives little benefit from the fact that he holds a stock. In bad times he gets little comfort from the fact that he holds a limited-return security.

10. The profitableness and the size of the business.‡ A recent study for the National Bureau of Economic Research points out that the size of the company vitally affects the capital structure. For very small companies (those with assets of less than $50,000) the

* See Appendix F for types of new securities, including preferred stock, issued over a period of years.

† Preferred stock is stock, but the salesmen often gave the impression that the dividends were guaranteed, that the company "promised" to pay them. If later the company failed to pay dividends, the owners of such stock sometimes threatened physical violence, perhaps upon some innocent local manager. Local managers of such companies were known to complain that they were afraid to appear on the streets at night.

‡ The data in this section are taken from Neil H. Jacoby and Raymond J. Saulnier, *Business Finance and Banking,* a study in business financing published by the National Bureau of Economic Research, 1947, pp. 31-37, the quotation appearing on pp. 33, 35. While the findings are mainly for 1939 and 1940, the writers point out that the conclusions are not peculiar to those years.

amount of debt was small in 1939 compared with stock. Reasons for this may lie in sheer inability to borrow or in a desire on the part of the management to retain the present size of the company or plant. The tendency on the part of a corporation to borrow, however, increases with its size up to a certain point. Very large companies tend to make a greater use of equity funds. To quote the study:

> Small and medium-sized concerns (with assets from $50,000 to $5,000,000), having greater accessibility to credit than to equity funds, are more likely to finance their activities through loans. Large businesses can make public offerings of equity securities readily, and in addition, they have a higher and more stable average profitability which enables them to build up equity and pay off debt by retaining earnings in the enterprise. Another reason for the greater importance of equity in businesses of large size may be the direct correlation between size and age of enterprises; large businesses, being older, may have relatively more equity funds simply because they have had more time to accumulate equity through retention of earnings than have smaller concerns.

In regard to the relation between the capital structure and the profitableness of firms, the National Bureau of Economic Research points out that companies earning money have a much lower proportion of debt to assets than do unprofitable enterprises. An important reason for this is the smaller amount of surplus accumulated by the unprofitable companies. Operating losses by their very nature reduce the equity of the stockholders. The Bureau also calls attention to the fact that sometimes companies cannot sell their par stock for a price equal to or above par. Since it was against the law, for instance, for railroad companies to issue stock for a price below par, these companies were forced to float additional bonds if they wished to obtain funds from external sources. This happened to many railroads during the 1920's and 1930's.

Summary. Many circumstances affect the capital structure of a corporation. Some conditions favor a low proportion of bonds to stocks, while others favor a relatively large contribution by the bondholders. The capital structure will be the result of numerous forces, some working in one direction, others in the other. In general we may say that a company will tend to have a large proportion of bonds if its operating ratio is low and its plant turnover small; if its income is steady; if most of its new funds are to be used for the

acquisition and construction of fixed assets; if the company is engaged in an industry where it has been customary to trade on the equity; if the company is relatively mature and stabilized and needs comparatively few new funds from outside sources; if the interest rates are low or falling; if legislation makes certain concessions to bond financing, such as has been the case under the federal income tax laws; and if the company is unable to issue stocks on reasonable terms.

Conversely, a company will tend to have a low proportion of bonds if its operating ratio is high and the plant turnover large; if the income is unsteady; if most of the new funds are to be used for working capital purposes; if there is a tradition in the industry against trading on the equity; if the company is young and needs funds often and must have considerable leeway in its future actions and decisions; if the interest rates are high or rapidly rising; if legislation and government policy favor equity financing; if the issuing of stock and its purchase by the public are "the thing to do"; and if the company is able to issue new stocks at a reasonable rate or is unable to borrow at advantageous terms.)

As already stated, many of these conditions may be pulling a company in two directions. Sometimes managements, for special reasons, do not adopt the proper type of capital structure or the one which these principles would seem to dictate. Occasionally a company may place undue emphasis upon one of these influences with little emphasis upon the others. Circumstances are often very arbitrary. As shown in the studies of the National Bureau of Economic Research, very small concerns may have few bonds outstanding for the important reason that they do not have access to the money market, while large businesses may have many stocks outstanding because the stock market facilities are readily available. Profitable companies have a smaller ratio of debt to contribution by stockholders than do unprofitable companies. When a company is unsuccessful, it tends to allow its debts to pile up, while a going concern, through the very fact of its profitable operations, may be able to build up its equity funds by the accumulation of earnings as well as because of easier access to the stock markets.

As a general rule the larger proportion of bonds to stocks is found among companies in the public utility and railroad fields, while the smaller amounts are found in the manufacturing, merchandising, and mining fields.

PROBLEMS

1. Make a list of the influences and circumstances which will tend to increase the proportion of the long-term funds that will be raised by bonds and preferred stocks and of those that will tend to increase the funds raised from common-stock contributions. Show how some of these will tend to offset one another in the case of even the same corporation.

2. A company producing automobile mufflers and holding a satisfactory ten-year contract with an automobile manufacturer has the following capital structure:

$100,000 of noncallable first mortgage 5-percent bonds, closed-end, due in ten years; $200,000 of 6-percent cumulative, nonparticipating, noncallable preferred stock; 3000 shares of common stock of a par of $100; and surplus items totaling $200,000. The income available for interest and dividends after allowance for all taxes has averaged $80,000 over a period of ten years. The company wishes to raise $250,000 of additional funds. The estimates show that the company can earn the same rate of return on the additional funds as on the present investment and that it can sell 4-percent debenture bonds at par. Instead of issuing new bonds, it could issue additional common stock, receiving for it $125 per share.

As a stockholder and a member of the board, argue for raising this new money by the issuance of bonds. What can be said for the issuance of additional common stock? About what other facts would you inquire in arriving at a decision?

3. The Securities and Exchange Commission has made a study comparing the capital structure of utility companies with the price-earnings ratio of the common stock. For the purpose, it has arranged the companies studied into Groups A, B, and C.

The companies in Group A have bonds and long-term debts aggregating on the average 38 percent of the total capitalization. (The capitalization in this case includes bonds, stocks, and surplus.) Preferred stock constituted 3 percent of the capitalization, common stock and surplus constituted the balance, or 59 percent. The companies in Group B had a debt equal to 41 percent of the total capitalization, preferred stock 19 percent and common stock and surplus 40 percent. The companies in Group C had a debt of 54 percent, preferred stock 12 percent and common stock and surplus 34 percent.

On June 30, 1947, the common stock of the companies in Group A sold at 16 times earnings—that is, the multiplier was 16, or put another

way, the earnings per share were capitalized on the market at about 6.25 percent. This is called a price-earnings ratio of 16. The multiplier or price-earnings ratio for the common stocks of companies in Group B was 13, which meant capitalization at an interest rate of about 7.7 percent. The multiplier for Group C was 9, involving the use of about 11 percent. (*Commercial and Financial Chronicle,* July 24, 1947, p. 30.)

a. Do you see any significant relation between the nature of the capital structure and the price-earnings ratio?
b. The bonds of which group do you suppose would in general carry the best investment rating?
c. In which of the groups do the companies have the greatest freedom in raising new capital or in issuing new securities?

4. Is there any relation among the following three news items?

Back in the heyday of the holding company (1929), the Associated Gas and Electric Company had raised 86 percent of its long-term funds from bonds and preferred stock. This represented the thinnest equity traded on by any of the major holding-company systems studied.

In the Stock Market crash of 1929-32 the common stock of Associated Gas and Electric suffered the most severely.

The Associated Gas and Electric Company had to pay the highest rate on its bonds. (Items gathered from Merwin H. Waterman, "Financial Policies of Public Utility Holding Companies," in *University of Michigan Business Studies,* Vol. 5, 1932.)

5. A recent study shows that in 1939 fixed assets were 37 percent of the total assets of manufacturing companies, 77 percent for public utilities, 57 percent for mining, 26 percent for retail trade, 10 percent for wholesale trade, 57 percent for service industries and 23 percent for construction. (Neil H. Jacoby and Raymond J. Saulnier, *Business Finance and Banking,* National Bureau of Economic Research, 1947, pp. 29-30.) Where the fixed assets were large, the current assets were, of course, relatively small, and where the fixed assets were small, the current assets were large.

a. Explain the differences among these industries.
b. In which of these industries would you expect the sales or operating revenues to be high in relation to the fixed assets and in which cases low?
c. In which would the operating ratio be high and in which would it be low?

(See also Table "Selected Items in Combined Financial Statements for Certain Groups of Companies . . ." in Appendix E.)

6. Does the capital structure for the "180 Electric and Gas operating utilities" as found in Appendix E conform with your picture of the situation after reading this chapter?

7. Certain items on the balance sheets of the Indianapolis Water Company, Southern Railway Company, Public Service Company of Indiana, Inc., and The Kroger Company stood as follows as of December 31, 1946:

1946	Indianapolis Water Company	Southern Railway Company	Public Service Company of Indiana, Inc.	The Kroger Company
Gross property or plant and equipment	25,540,208	578,272,521	112,741,945	39,321,609
Less: Valuation reserves	2,222,967	93,183,320	12,373,898	24,120,883
Net property or plant	23,317,241	485,089,201	100,368,047	15,200,726
Net current assets (that is, current assets minus current liabilities)	2,298,823	44,357,528	2,578,594	46,347,007
Bonds and long-term debt	15,725,000	233,748,882	59,814,000	...
Preferred stock	1,054,900 (5%)	60,000,000 (5%)	15,000,000 (3.5%)	49,300 (6%) 40,700 (7%)
Common stock	4,000,000 *	129,820,000 †	27,694,425 ‡	33,671,735 §
Surplus	2,744,593	163,938,701	2,983,453	24,038,268

* Two kinds of common stock outstanding: 300,000 shares of Class A no-par and 200,000 shares of Class B no-par. Class A gets prior dividends of 80¢ per share; then, when B has received its 80¢ per share, the two classes share together

† Outstanding 8381 common shares, par value $100 per share, and 1,289,819 shares without par value. $3 per share were paid on each in 1946.

‡ Outstanding 1,107,777 no-par shares.

§ Outstanding 1,836,589 no-par shares.

Certain profit and loss figures for 1946 were as follows:

Indianapolis Water Co.: gross revenues $3,615,494; operating expenses $1,160,834; depreciation $195,969; taxes, including federal, $998,019; operating profit $1,260,672; interest charges $474,756.

Southern Railway Company: total operating revenues $212,041,109; total operating expenses including depreciation $171,791,729; net revenue from operations $40,249,380; other expenses, including all taxes $20,-938,233; net railway operating income $19,311,146; total other income $2,848,272; total income $22,159,418; miscellaneous deductions $256,079; income available for fixed charges $21,903,340; total fixed charges, including interest on long-term debt $12,651,070.

Public Service Company of Indiana, Inc.: operating revenues $27,373,346; operating expenses $10,394,199; maintenance $1,624,602; depreciation $2,932,200; federal income taxes $3,002,000; general taxes $2,207,484; net operating revenues $7,212,861; other income $222,947; gross income $7,435,880; interest on funded debt $1,824,244; other fixed charges $429,943.

The Kroger Company: net sales (after returns) $567,487,547; operating expenses, general expenses, non income taxes and cost of sales $544,251,362; depreciation $2,405,942; federal taxes $8,067,500; total net income (after certain adjustments and reserves not enumerated here) available for dividends $9,365,780.

a. Note carefully the capital structure of these companies.

b. Compute:

(1) Plant turnover (net property or plant plus net current assets divided by operating revenues or gross revenues or net sales).

(2) Rate of return on investment, using two methods.

(3) Rate of return on total stock investment or on net worth.

(4) Rate of return on common stock equity.

(5) Times interest or charges earned.

(6) Earnings per share of common stock.

Chapter 10

Changes of the Capital Structure—Payment and Refunding

We have just seen that there are numerous conditions and circumstances which will influence the capital structure of a corporation. The relative strength of these influences may vary from time to time even for the same corporation. Times change, and with such changes comes the need for adaptations. Bonds and preferred stocks may be called or refunded. Holders of convertible bonds may find it of advantage to exercise their privilege. The company may decide to change its capital structure by various forms of recapitalization. Often, alas, a company may be forced into financial difficulties, perhaps even into reorganization. And there is always a possibility of a company raising new funds for a number of purposes.

Corporation *E* has the following balance sheet:

Assets		Liabilities	
Total	$2,665,000	First-mortgage bonds, 5 percent	$1,000,000
		Current liabilities	115,000
		Common stock	1,000,000
		Preferred stock	50,000
		Surplus	500,000

Let us assume that this corporation, for one reason or other, wants to "extinguish" * its 5-percent mortgage bonds. There are three nor-

* While we are referring to the bond contract and to the extinguishing of bonds, the reader will, of course, remember that preferred stock may also be extinguished. There are many points of difference between the procedures: preferred stock, for instance, has no maturity date and cannot be paid at maturity though it may often be called, refunded, or converted.

mal and customary ways in which specific bonds may be extinguished, provided, of course, the bond contract contains the appropriate provision:

1. Payment, once and for all, with cash, before or at maturity.
2. Refunding, either before or at maturity.
3. Conversion.

The first two of these may occur at the option of the company. They form the subject of the present chapter. The third, occurring on the initiative of the bondholder, provided the contract contains the appropriate provisions, will be discussed in Chapter 11.

PAYMENT

Conditions for payment. If the payment is to be made before maturity, the bonds must have been made callable, or market conditions must be such that the company finds it feasible and possible to purchase its own bonds in the open market. The decision of a corporation will depend upon three basic questions: (1) Does the company have adequate working capital, especially cash, to permit this payment? (2) Can the company earn more if it retains its funds than it would save in interest if it used them to pay off the bonds? (3) What is the underlying philosophy of the industry or of the company as to its capital structure?

A company would be foolish in 1948 to call bonds maturing in 1960 if it had a large group of bonds falling due in, say, 1950. The Union Pacific Railroad conserved its cash during World War II in anticipation of maturities occurring in 1946 and 1947, but the Pennsylvania Railroad did not hesitate during the same period to wipe out a $100,000,000 of bonds by payment at maturity or by call since it had adequate working capital for the purpose. A company able to earn only 3 percent on its assets would be foolish not to consider calling its bonds before maturity, if they carried an interest rate of 5 percent. On the other hand, the management of a company deliberately doing much trading on the equity would hesitate to call its bonds, if such act compelled the floating of additional common stock to raise the necessary cash. As a matter of fact, if there is outstanding preferred stock which has the right to elect directors if the dividends are passed, the management might be eager to maintain a large amount of more or less idle working capital to assure its ability to pay dividends.

Numerous companies have in the past twelve to fifteen years steadily paid off or called many of their funded obligations. During the period 1940 to 1944 the Class I railroads in the United States reduced their funded debt outstanding from $9,140,000,000 to $7,923,000,000 mainly by using the large earnings and accumulated cash of this period to call bonds or to pay them off at maturity.* Companies in other fields have been able during the stock-market booms to sell stock at such favorable prices as to raise funds to call and pay off their bonds. Many important industrial companies have become free of long-term debt.

Effects of decrease in corporate debts. The decrease in the amount of outstanding corporate bonded indebtedness has had three important financial and investment effects: In the first place, this decrease has reduced the amount and variety of the fixed-return securities, outside of United States government bonds, available to the investing public. This reduction, in turn, has intensified the scramble by insurance companies and other institutional investors, as well as by individuals, to find outlets for their investable funds, and has lowered the yield of bonds by boosting the prices. In the second place, this trend tended to push investment and surplus funds into stock and other speculative outlets and at times threatened a boom in these markets. In the third place, it meant the improvement of the financial status of many corporations and placed them in a favorable position to issue bonds should they again seek large quantities of borrowed capital funds. Such financial independence has also tended to dull the need by many companies for short-term loans from external sources, a situation which may have important effects upon the nature of our commercial banking system.

Attitude in regard to United States bonds. Many United States obligations will fall due in a few years. We will then have to choose among the possibilities of levying adequate taxes to pay off the bonds, of reducing other government expenditures, or of refunding. Which choice will be made will depend, of course, upon political and economic conditions at the time. The rapid payment of bonds held by the banks is deflationary in that it would necessitate high taxes and would involve the squeezing out of bank deposits which were created when the bonds were sold to the banks. The reduction of ordinary expenses of government may be politically difficult. The practice of refunding may, therefore, be encouraged

* *Survey of Current Business,* December 1945, pp. 10-11.

for many years with payment of bonds now and then as circumstances warrant.

The likelihood that, in the event of threatened depression and unemployment, we will again adopt the fiscal policy of deficit spending and public works furnishes a strong argument for the payment, rather than the refunding, of large quantities of United States bonds. Such a program of public works, whenever used, should be financed through the creation or expansion of purchasing power. The government will, therefore, have to obtain the funds from commercial banks, rather than through borrowing from individuals and taxation. This means that the banks must have excess funds to lend. The payment and cancellation of bonds should help to build up the excess reserves of the banks and should also maintain the high credit standing of the government. But, when it is argued that high taxation represses business and that the paying of bonds held by banks is deflationary in that it squeezes out deposit credit, remember that the logical time for both is during a period of boom and threatened inflation.

REFUNDING

Conditions for refunding. We have just referred to the process of refunding. By this is essentially meant the substitution of one security for another, though the term is most frequently used to designate the substitution of one bond for another.* The refunding of bonds may be undertaken either at the maturity of the bonds or before they fall due. If the $1,000,000 issue of 5-percent bonds of Corporation *E* are about to mature, the problem becomes that of comparing the productivity to the company of the $1,000,000 of assets with the interest rate which would have to be paid on a new loan. If, for instance, the company can earn 6 percent on these

* The term refunding is sometimes used to refer to any of the following: (1) the substitution of one bond for another, (2) the substitution of one preferred stock for another, (3) the substitution of a preferred stock for a bond, (4) the substitution of a bond for a preferred stock. The orthodox use of the term is the substitution of one bond for another.

The substitution of a long-term debt or bond for a short-term note or debt is called *funding*. This is done mainly to relieve a corporation of embarrassing current liabilities. Sometimes a strong company has been able to sell long-term bonds at a favorable rate and use the proceeds to pay off bank loans or other current obligations. Such funding improves the working capital position of a company. It should not be done, however, unless the probable long-term earnings give assurance of ability to pay the increased charges by a comfortable margin.

funds while it could borrow on a new loan at a cost of only 3 percent, refunding would be profitable. Most of the bondholders would probably be willing to accept the new bonds for the old. Those preferring to receive their money would be paid in cash with the proceeds of the new bonds which would have to be sold on the market. However, a company so situated that it can save interest in this way will generally undertake the refunding long before the date of maturity. Waiting until the bonds fall due may give the market an erroneous impression that the company wants to extend the due date because of financial difficulties.*

The financial and business skies may as a matter of fact not be bright. As the due date of a bond draws near, general business conditions may be bad and the money market tight, or the company may find itself in an unfavorable situation. In such event refunding may take place for the simple reason that the company cannot pay. The corporation may then be compelled to offer inducements of various kinds to get the old holders to accept new bonds. Such concessions have included the payment of cash and stock bonuses, the raising of the coupon or interest rate, the strengthening of the position of the security through stronger restrictive provisions, a more rigid sinking fund requirement, an improved lien or backing, or the addition of a guaranty by some related or affiliated company. Refunding under these circumstances is not likely to improve the position of the company, though it might be a better alternative for all concerned than bankruptcy and reorganization proceedings.

If the refunding operations as just described do not seem practicable or possible, the maturity of the bonds may simply be extended by agreement between the corporation and the bondholders. A common period of such extension is ten years. Many extensions of this type took place during the severe depression of 1929 to 1933. In a purely voluntary agreement of this kind the company may also have to make various concessions, such as an increase in the interest rate. The bonds may simply be stamped with a new maturity date. They may then be briefly described in the trade as "extended bonds" or possibly "stamped bonds."

Interest saving. Refunding in order to save interest is generally undertaken long before maturity. Corporation *E* has outstanding

* Commercial bankers give this advice: If you owe money at a bank and wish to have your note renewed or extended, be sure to come in and make the arrangements well in advance. Do not wait until the note is due.

$1,000,000 par value of bonds bearing a coupon rate of 5 percent. Assume that the directors, after analyzing the conditions of the market, conclude that they can float $1,000,000 of bonds at 3 percent. They may figure either that many of the bondholders will accept new bonds in place of their old bonds, par for par, or that the new 3-percent bonds can be sold to the public for 100. In the latter event the funds so obtained can be used to call the 5-percent bonds at 100. The saving of interest to the company then will be $20,000 per year.

But the figures and computations just given are rather unrealistic and improbable. The usual corporation bond is generally not callable at 100. Common call figures are 105 or 110. The new 3-percent bonds, moreover, may not be sold at exactly par. It may be necessary to float a total par value of more than $1,000,000 in order to raise the necessary money.

An illustration. Let us say that the call price of Corporation *E's* 5 percent bonds is 105. A careful study of the market and estimates by investment bankers indicate that new 3-percent twenty-year bonds, also to be callable at 105, can be sold to the public at a price of 97.5 (that is, $975 for a $1000 bond) and that the underwriting and selling expenses will be about $25 per $1000 bond. The company should, therefore, receive $950 cash for each $1000 bond sold. The calling of the old bonds will require $1,050,000 cash. The issuance of $1,000,000 par of new bonds would bring in only $950,000. To receive $1,050,000 cash the company would have to sell $1,050,000 ÷ .95 or $1,105,263 face value of new bonds. (Let us call it $1,105,000.) The interest on the new bonds, accordingly, will be $33,150. Since the interest on the old bonds was $50,000, this makes an apparent saving of $16,850 per year.

The actual saving, however, is less than $16,850 per year. The bonds outstanding will total $1,105,000, instead of $1,000,000, an increase of $105,000. To make the new interest expense comparable with the old, we must make allowance for the increase in the principal. One way to do this is to assume the calling of the $105,000 over the life of the bond issue, say twenty years at the rate of $5250 par value each year, or $2625 each half year. Since the call price is 105, the annual expenditure for this purpose is $5512.50. This $5512.50 must be subtracted from the saving of $16,850 already computed.

Another modification in our computation must also be noted. We

figured the interest on the new bonds to be $33,150. Since we are assuming, however, that $5250 is called each year or $2625 every six months, it is necessary to reduce the estimated interest charge by the amount of the interest on the called bonds. A rough way of computing this is to assume that the calling will be in equal amounts each six-month period. Thus the average amount outstanding will be about $52,500, interest on which at 3 percent would be $1575. This figure should be subtracted from the $33,150. The total savings would thus be $12,913.*

Refunding operations to save interest charges are frequent during periods of falling or very low market rates. Frequently the refunding operation is combined with the raising of new capital. For instance, in our illustration, if market conditions are favorable, it might be desirable and possible to float $1,500,000 of new bonds, the extra proceeds to be used to add to the working capital of Company *E* or to expand the plant.

In the long protracted periods of low or falling interest rates, such as those we have experienced for some twelve to fifteen years, practically all callable bonds were redeemed wherever the corporation's credit was such as to induce and to permit it to take this step. Most issues of new securities during this period were for the purpose of refunding or retiring old indebtedness. Relatively few issues were for the raising of new capital.

The premium between par and the call price, say of 105, or $50 per $1000 par bond, is deductible under the corporation income tax and was also a deduction for the excess profits tax. The discon-

* Computed as follows:

	$50,000	old interest
−	33,150	new interest
=	16,850	gross saving
−	5,512.50	annual redemption
=	$11,337.50	
+	1,575	overestimated interest on new debt
=	$12,912.50	

In these calculations you must bear in mind that the company may not actually find it advisable to call the $105,000 of bonds. The calling is simply for our calculations. Moreover, if the bonds are in $1000 denominations it would be impossible to call exactly $2625 of bonds each year. The calculations in our illustration follow the method found in C. W. Gerstenberg, *Financial Organization and Management* (2d rev. ed.), Prentice-Hall, 1939, pp. 259-60.

tinuance of the excess profits tax at the end of 1945 helps to explain the great bulge in the amount of refunding in that year. Many corporations came in just "under the wire." *

Sinking-fund bonds versus serial bonds. One of the weaknesses of a natural person is his unwillingness or inability to make adequate provision to take care of future financial obligations. The corporation may be even worse in this respect than the average individual. Managements come and go, but the corporation may go on forever. Each set of officials may feel that it is not responsible for a debt falling due in the distant future. The corporation, like the state, should theoretically take a long-range view in its planning, but sometimes corporate officers imitate the politician, and leave to future generations the settlements of debts incurred for today's improvements.

The realization by many conservative managements that, in a highly dynamic age, plants and equipment are steadily becoming obsolete, the goading by such federal regulatory agencies as the Interstate Commerce Commission, the Federal Power Commission, and the Securities and Exchange Commission, and the insistence by many individuals that their investments be better safeguarded, are steadily forcing corporations to make provision for taking better care of their future financial requirements. In the case of bonds this is generally done in three ways: (1) through a tendency to look with disfavor upon bonds with too long terms; (2) through the serial bond; (3) through the sinking fund. The second and third of these deserve further discussion at this point.

Under the serial system, designated bonds bearing the maturity date on their face fall due at regular intervals, say every six months. This type of bond is often issued on rolling stock in the case of railroads or on schoolhouses and highways in the case of governmental units.† It is figured that these improvements will gradually wear out or become obsolete at some computed rate and will have to be replaced. The intention is generally to have the securities fall due at a rate even more rapid than the rate of depreciation of the property. The issuing corporation is required by

* See Appendix F for amounts of financing for new capital and for refunding over a period of years.

† There is no real reason why an ordinary industrial corporation could not issue serial bonds. The United States Steel Corporation's serial debentures due up to May 1, 1955, in semiannual installments furnish an illustration of such industrial serial bond not based on a mortgage.

the contract to pay these bonds when they fall due. Failure to pay even one installment would constitute a default.

Under the sinking-fund plan, on the other hand, all the bonds of the issue have the same maturity date. The contract provides for the making of regular (usually annual) payments into a sinking fund. Such sinking fund, as we shall see in a moment, may be invested with some outside company or in the assets of the corporation itself, or it may be expended from time to time in buying up and canceling a portion of the bonds. The corporation issuing a sinking-fund bond may refund all, or at least a part, of the issue rather than wait to pay off the full amount at maturity. Though theoretically the sinking-fund installments invested at interest should at maturity equal the amount of the bond issue, frequently the estimated amount of the sinking fund at the maturity of the bonds can be only a small percentage of their face value.

Bonds issued under the serial method will sell on the market for different prices at the identical time. The market price of a bond is dependent on the coupon rate, the date of maturity, and the current rate of interest.* If the coupon rates on the different series are the same, the fact that the dates of maturity do not coincide will cause the prices of each series at any one time to be different. A twenty-year issue due in series each six months and bearing identical coupon rates could at the first have forty different quotations, since there are really forty separate sets of bonds outstanding. At the end of ten years, when one half of the bonds have been paid off, there could be twenty quotations. At the end of nineteen and one-half years, at which time just one of the original forty series will be outstanding, there will be only one quotation. It will be realized that comparatively few serial bonds can be listed on the stock exchanges.

On the other hand, there can be only one market price at any one time for a sinking-fund bond issue. All the bonds of the issue are identical in all respects. It is true, of course, that some of them may be called or canceled, but, since the selection is made by lot, there can be only one market price at any one instant.†

* For further discussion of some elementary mathematics in connection with bonds, see Chapter 19.

† The denominations of individual bonds may, of course, vary. Some bonds may be coupon, others registered, with slightly higher prices for the coupon bonds. These differences have nothing to do with the basic nature of the corporate obligation.

When a serial bond falls due as provided on its face, the corporation must pay it or be considered in default. But a corporation which fails to keep up the required sinking-fund contribution may often avoid the legal consequences of default. The holders of the bonds, for instance, may not be aware that the required payment into the sinking fund was not made. Or they may not care, just so they receive their interest. Or they may be willing to waive the requirement. The trustee may fail to use pressure on the debtor corporation. If the amount of the annual installment depends on the size of the net income, the company may manipulate its accounting so as to escape the obligation to make a specified contribution to the fund. In short, the sinking-fund provision is difficult to enforce.

The sinking fund, as we have already indicated, may be invested in the company's own plant or working assets, or it may be placed in a special securities or bank account, or it may be used to buy up portions of the outstanding bonds. Investment in the company's own plant or working capital subjects this special fund to the same conditions as those facing the company's general business. If the corporation is a great success, this may be an advantage. If the company earns a larger return on its general assets and plant than it pays interest on the bonds, such investment of the sinking fund will strengthen its position. But a period of unfavorable business developments or bad management could sweep this fund away together with the rest of the assets. The fund is subject to the same risks as the business of the company.

A more acceptable method is to place the funds outside the corporation's usual assets, such as in bank deposits, government bonds, or in the securities of other corporations. Such investment, however, may involve a three-fold difficulty. In the first place, the organizations in which the funds are placed could lose their financial standing, or, because of market conditions, their securities could fall so much in price that the fund would be inadequate or unavailable when needed. Furthermore, the rate of return on this investment might be lower than the rate of interest paid by the corporation on the bonds which are protected. Finally, the actual return might vary from that planned in the calculations, with a resulting discrepancy between the amount of the sinking fund actually accumulated and the amount as determined by the mathematical computation.

Because of these difficulties and uncertainties, many corporations prefer to devote the sinking fund immediately to the buying up of their own bonds. The bonds that are purchased may be kept alive. In such case the company is in effect making an asset of its own liabilities and is paying interest to itself. This is unsound. A more forthright method is to cancel the bonds that are bought or called. This reduces the interest charges and definitely cancels an obligation.

The cancellation by the corporation of its own bonds does have several disadvantages. As the amount of outstanding bonds is reduced, the number of transactions in the remaining bonds on the market or on the exchanges may fall. Consequently the issue may lose its ready and easy marketability. The cancellation also alters the capital structure earlier than was originally planned. Some corporations like to keep the bonds alive so that they may be resold later on the market.

Effect of two methods on equity behind bonds. The cancellation of bonds, whether by the serial method or by the use of the sinking fund, thickens the equity or cushion behind the outstanding bonds more than does the simple investment of the fund. Assume that Corporation *F* has a balance sheet as follows:

Assets		Liabilities	
Total	$500,000	Bonds	$100,000
		Current liabilities	100,000
		Common stock	200,000
		Surplus.	100,000

The ratio of the assets to the bond is as $500,000 is to $100,000, or 5 to 1, or, if we turn the ratio around, the bonds are equal to $\frac{1}{5}$ of the assets.

Now, assume the corporation in a certain year has $20,000 left after the payment of all expenses and costs, interest and dividends and that this entire $20,000 is placed in a sinking fund and is invested either in the company's general assets or with some outside institution. While numerous other changes in most of the accounts may, of course, have taken place, theoretically the *pro forma* balance sheet can now read as follows:

Assets		Liabilities	
Total (including the sinking fund, whether invested in a special outside institution or mixed with the company's assets)	$520,000	Bonds	$100,000
		Current liabilities	100,000
		Common stock	200,000
		Surplus (including the earnings transferred to this account)	120,000

The ratio of the assets to the bonds is now 5.2 to 1. This represents some thickening of the equity or protective cushion behind the bonds.

Now, assume, instead, that the company used $20,000 of its assets either to call or to purchase that amount of bonds at par and to cancel them or to pay a serial installment of $20,000.* The balance sheet would then stand:

Assets		Liabilities	
Total	$500,000	Bonds	$ 80,000
		Current liabilities	100,000
		Common stock	200,000
		Surplus	120,000

The ratio of assets to bonds is now $500,000 to $80,000, or 6.25 to 1. This represents a greater thickening of the equity than that which occurred when the fund was merely invested.

But the question arises: Are not the additional earnings of $20,000 "spent"? Why, then, keep the surplus figure at $120,000? The answers to these questions involve a reference to the nature of surplus, which we shall discuss in Chapter 14. When assets or cash is spent for corresponding amounts of other assets, there is merely a rearrangement of the assets. There is no change in the total assets. There is also no change in the surplus. When cash is spent to pay off bonds at par, there is a decrease in the cash and a corresponding decrease in the liabilities, or, as the accountant would put it, bonds outstanding are debited and cash is credited. The net worth

* This assumes a call price of $100. If the call price were $110, $22,000 of assets would be required to pay off $20,000 par of bonds. The surplus would have to be reduced by $2000.

of the corporation is not affected by either of these transactions. The surplus is not spent.

The sinking-fund reserve. To illustrate the creation and use of a sinking-fund reserve, let us assume that Corporation *F* sets up such reserve and adds to it a sufficient amount each year to make $100,000 at the end of twenty years. The company is not to use the accumulated funds to pay off the bonds from time to time but is to let them accumulate until the date of maturity of the entire issue. At that time the whole fund is to be used to pay off the outstanding bonds.

The computation of the exact amount that would have to be set aside annually at a given rate of interest to amount to $100,000 at the end of twenty years, together with the other details, is shown in the footnote.* We will here ignore the accumulations of interest

* The fact that interest is to be allowed on the assets in the sinking fund makes the computation more complicated than that found in the body of our text. Assume the interest rate to be 5 percent. We now consult an interest table to determine what sum it will be necessary to set aside in each of the twenty years at compound interest of 5 percent to bring the total up to $1 at the end of that time. On the 5 percent page of such table, we find that the figure of $0.03024259 is opposite the twenty years. This means that the setting aside of $0.03024259 each year with interest compounded at 5 percent each year will equal $1 at the end of twenty years, or that 100,000 times that amount, or $3,024.26 placed in the fund each year with interest compounded annually at 5 percent will equal $100,000 in twenty years.

There are two separate sets of bookkeeping entries: those for setting up the sinking fund and those for creating the reserve. At the beginning of each year we debit (add) $3024.26 to the sinking fund and credit the same amount to cash. These entries transfer $3024.26 from the cash account to the sinking fund. At the end of the year this $3024.26 in the sinking fund will have accumulated a year's interest, or $151.21. When this interest is received, the company debits cash and credits income or surplus, after which it immediately transfers that amount to the sinking fund by debiting the sinking fund and crediting cash. This now makes the sinking fund $3024.26 plus $151.21. At the beginning of the second year, the company adds another $3024.26 installment to the sinking fund. At the end of this second year the cash which was earned as interest on the two installments of $3024.26 plus the extra interest on the $151.24 earned during the first year will be added to the sinking fund. And so the process goes on year after year, until at the end of twenty years, the sinking fund will, by our calculations, be $100,000.

In creating and adding to the sinking-fund reserve, the accountants will year after year reduce (debit) surplus or income by $3024.26 and will credit it to the reserve. When the interest is earned they will, after having made necessary additions to income and to cash, in turn debit the appropriate amounts to income or surplus and credit them to the sinking-fund reserve. Thus, the sinking-fund reserve will, by our supposition, also equal $100,000 at the end of the twenty-year period.

on the fund and assume that one twentieth of the total required $100,000 is set aside each year. We will also assume that the company is to build up both a sinking fund and a sinking-fund reserve. We will, however, also show the figures in case no sinking-fund reserve is set up or required. The sinking-fund reserve is taken out of income or out of surplus.

Original figures when $100,000 bonds had just been issued:

Assets		Liabilities and capital items	
Total......	$500,000	Twenty-year bonds.... .	$100,000
		Current liabilities.	100,000
		Common stock.	200,000
		Surplus	100,000

(Company is assumed to earn $5000 over and above all expenses, costs, interest on bonds, and all dividend disbursements. It sets aside a sinking fund of $5000.)

Year I

Without reserve			With reserve		
Assets	Liabilities and capital items		Assets	Liabilities and capital items	
Total (including $5,000 addition to sinking fund) $505,000	Bonds	$100,000	Total (including $5,000 addition to sinking fund) $505,000	Bonds	$100,000
	Current liabilities	100,000		Current liabilities	100,000
	Common stock.. .	200,000		Common stock	200,000
	Surplus (including the $5,000 additional accumulation)	105,000		Surplus	100,000
				Sinking-fund reserve	5,000

Year II

Without reserve			With reserve		
Assets	Liabilities and capital items		Assets	Liabilities and capital items	
Total (including $10,000 in sinking fund) $510,000	Bonds............	$100,000	Total (including $10,000 in sinking fund) $510,000	Bonds	$100,000
	Current liabilities...	100,000		Current liabilities...	100,000
	Common stock	200,000		Common stock.. ..	200,000
	Surplus (including the total $10,000 addition)..	110,000		Surplus.........	100,000
				Sinking-fund reserve	10,000

AT END OF TWENTY YEARS

Without reserve		With reserve	
Assets	Liabilities and capital items	Assets	Liabilities and capital items
Total (including $100,000 in sinking fund) $600,000	Bonds ..... . $100,000 Current liabilities.. 100,000 Common stock . 200,000 Surplus (including the total $100,000 accumulation) .. 200,000	Total (including $100,000 in sinking fund) $600,000	Bonds . $100,000 Current liabilities 100,000 Common stock 200,000 Surplus . . . 100,000 Sinking-fund reserve 100,000

The bonds now fall due. Since the sinking fund, by our assumption, is equal to exactly $100,000 at the end of twenty years, it will be converted into cash and used to pay off the bond issue. When this has been done, the balance sheet stands as follows:

Without sinking-fund reserve		With sinking-fund reserve	
Assets	Liabilities and capital items	Assets	Liabilities and capital items
Total ($100,000 assets in sinking fund have been used to pay off bonds) $500,000	Current liabilities... $100,000 Common stock..... 200,000 Surplus (bonds have been paid off).... 200,000	Total ($100,000 assets in sinking fund have been used to pay off bonds) $500,000	Current liabilities . $100,000 Common stock ... 200,000 Surplus . . . 100,000 Sinking-fund reserve (bonds have been paid off).. . . . 100,000

But our old questions persist: The sinking-fund reserve is still on the books. Was it not set aside to pay off the bonds? The answer is, *the sinking fund* was set aside, and was used, for the payment of the bonds, but the sinking-fund *reserve* is only a bookkeeping entry. But the doubt continues: Where there was no sinking-fund reserve, the surplus was built up to $200,000. It was not used to pay off the bonds. What, then, is the point and purpose of the sinking-fund reserve?

The answer to this would require a commentary on human nature. A general surplus account, with no labeling or earmarking, carries with it some danger. Stockholders may eye it as indicating a capacity to pay additional dividends. Employees may regard it as a symbol of profits resulting from the exploitation of labor. Politicians may consider it as evidence of too much saving by the cor-

poration and the withholding of too much purchasing power from the people. If the company yields to pressure from the stockholders or from the politicians and distributes extra cash dividends, the paying out of precious working capital may jeopardize the very setting aside of the sinking fund. If it makes additional payments to the workers over and above the general scale, similar results may occur, or, if the company is engaged in a competitive business, the equilibrium among the competitors may be destroyed.

To anticipate these protests, corporations often resort to the use of the sinking-fund reserve. Frequently the contract with the indenture trustee on behalf of the bondholders requires the setting aside of such reserve. As noted, this reserve is set up merely by making the appropriate subtraction from income or from surplus. It is a proprietary or surplus reserve. The creation of such a reserve really constitutes an announcement that as such it is not available as a basis for dividend or other distributions.

A "useless reserve." When the bonds have been paid off and canceled the sinking-fund reserve becomes what the accountants call a "useless reserve." Since the reserve was created over the years by charges to income or to surplus, the appropriate thing to do at the end is to reverse these processes and thus put it back into surplus. Such surplus then becomes legally available for dividends. The sinking-fund reserve, as we have seen, was essentially a device to conserve the cash and working assets of the company while the bonds were outstanding. When the bonds are paid off, this function has been performed. The reserve can then be restored to the source from which it came—surplus.

Summary. The decision by a company to pay or to refund its bonds depends upon the adequacy of its working capital, the rate of interest it can earn on its operating funds compared with the interest it would save by paying its bonds, and upon certain attitudes and philosophies of government, business, and society in general. (Incidentally, the problem of making this choice in the matter of the public debt will soon face the United States.) If refunding is planned it should be done before the bonds fall due. Refunding at maturity, often merely a process of extension, is likely to be carried out on disadvantageous terms. Most normal refunding takes place before maturity, mainly in an attempt to save interest. In computing the interest savings in a refunding process one must allow for the fact that the company may have to pay a premium, or a "dismissal wage," often of 5 or 10 percent.

In making provision for payment, some companies use the serial bond as opposed to the sinking-fund bond. Under the serial method, there is an absolute obligation on the company to pay off a designated portion of the bonds each year or half year, while under the sinking-fund plan, theoretically a fund is built up, invested at interest, and used to pay off the bonds at maturity. Actually, however, many companies use the periodic contribution to the fund to pay off or cancel part of the debt immediately. This procedure has several advantages over the steady accumulation of the fund at interest for use later to pay off the maturing bonds. There is then no worry about investing the funds. It eliminates the possibility that interest received on such investment might be lower than that paid on the debt. Then, also, the use of the fund to cancel the debt builds up the equity behind the outstanding bonds more rapidly than if it is actually accumulated and held by the corporation.

Other points are also to be considered in the choice between the two methods. The failure to pay a serial bond when due is sure to constitute a default, while a lapse of sinking-fund installments is often not considered serious. Information as to such lapse might even be withheld from those concerned. A sinking-fund bond issue will have only one price on the market at one time, but bonds issued under the serial plan may have a different price for each series.

The payment of bonds protected by a sinking fund consumes or uses up the fund. If, however, a sinking-fund reserve had been simultaneously created, the payment of the bonds leaves this reserve intact. The sinking-fund reserve has then become a "useless reserve" and it should, therefore, be thrown back into surplus. In reality, the sinking-fund reserve is merely a protective mechanism whereby the company attempts to conserve its surplus while the bonds are outstanding. When such reserve has been put back into surplus, it may be used as a basis for the payment of dividends.

PROBLEMS

1. The Pennsylvania Turnpike Commission in 1947 completed the issuance and sale of revenue bonds, $46,000,000 par, secured by the revenues from the turnpike connecting Harrisburg and Pittsburgh. The credit of Pennsylvania was not pledged. These new bonds were successfully bid for by a syndicate of bankers headed by Drexel and Company and associates and participated in by numerous other

investment bankers. The price received by the commission was 100.9399—that is, $1009.399 for a $1000-par bond. The coupon rate of interest is 2.5 percent. The bonds were resold to the public by the bankers at 102.50, to yield 2.38 to maturity. The bonds have a 30-year term.

The proceeds of the bonds were to be used to call the outstanding issue of $42,300,000 of 3.75 percent revenue bonds at a call price of 104 and to furnish other funds mainly to complete the turnpike.

a. How do revenue bonds differ from mortgage bonds?

b. How many bonds would the commission have to issue in order to call the old bonds? (Remember that the call price was 104 and the price received by the commission was 100.9399. Call this $1009.40 for a $1000 par bond.)

c. What is the gross saving in interest through this refunding process?

d. Taking into consideration the fact that investment banking will be discussed in Chapter 15 and yield on securities in Chapter 19, give tentative answers here to these questions:

(1) What is a syndicate?
(2) What are Drexel and Company and associates?
(3) What were the total gross profits to the members of the syndicate?
(4) What is meant by yield to maturity?

2. Jersey Shore (Pa.) Gas and Heating Company, according to a news item, has issued $25,000 first-mortgage sinking-fund debentures at par in order to retire a loan of $20,500 and to add to working capital.

a. What would you say about the consistency of the term "first-mortgage debentures"?

b. When a corporation floats bonds in order to retire a short-term loan, what is the process called?

3. *The Commercial and Financial Chronicle* gives figures for capital flotations by corporations for the first six months of 1947 as follows:

New capital	$1,793,640,123
Refunding	874,752,732
Total	$2,668,392,855

a. What are the possible uses to which "new capital" may be put?

b. Does this represent a continuation of the trend shown in the "New Security Issues by Corporations in the United States, by Purpose of the Issue and Type of Security" table in Appendix F?

c. How do the above figures differ from those in 1929? What are the reasons for the difference?

d. Are there any reasons to believe that issues for "new capital" will continue to exceed those for refunding?

4. Outline the arguments for and against the issue of the serial bond. Then outline the arguments for and against the issue of sinking-fund bond. Why are serial bonds not used more frequently?

A certain company announced that it was calling its bonds "for the sinking fund." What was meant by this?

5. Find a current illustration of the refunding process, using the sources indicated in problem 6 of Chapters 4 and 5. Note carefully the details, such as the call price of the issue redeemed and the amount of proceeds which the company receives for the new bonds.

6. Referring to "New Security Issues by Corporations in the United States . . ." Appendix F, discuss the following:

a. How do you account for the great amount of "new capital" in 1927 to 1929?

b. How do you account for the rise and the fall in the popularity of the preferred stock?

c. How do you explain the small amount of security issues in the early thirties?

d. When did the great bulk of the refunding occur? Does the table "Yields on Various Forms of Securities, 1929-1947," Appendix L, help to explain the trends in the purpose of the security issues? Note also the excerpts from *Survey of Current Business,* March 1948, found in Appendix L.

Chapter 11

Changes of the Capital Structure—Conversion

THE holder of a prior security, such as a bond or a preferred stock, is sometimes given the option of changing it on prescribed terms into common stock. Such bonds or preferred stock are known as convertible securities. While the converting is done at the option of the holder, there has been at least one unique instance where the initiative was taken by the corporation. This was the 6-percent convertible debenture certificate, Series B, of the Associated Gas and Electric Corporation, dated January 1, 1927.

Purposes of the conversion feature. A company inserting the convertible privilege in a bond contract does not intend to give away something for nothing. The main purposes of, or conditions giving rise to, convertible bonds * may be summarized:

1. To enable the company to sell bonds more easily in times of possible inflation of commodity prices. Convertible bonds were comparatively popular from 1933 to 1935, from 1936 to 1937, from 1939 to 1942, and again after the end of World War II, all of these periods being times when inflation was threatening.

2. To enable the issuing company to add one more argument to its selling campaign. If hard times come, the holder has a bond; if prosperity comes, he has an option on common stock. The holder may stand on either side of the fence, but, of course, once having converted into stock, he cannot shift back.

3. To enable a weak company to issue bonds which it probably could not sell to advantage without the fanfare of the conversion feature.

* Though there are also convertible preferred stocks and though occasionally the convertible bonds may be converted only into preferred stock, we will use the term "convertible bonds" in our discussion and will assume that they are convertible into common stock.

4. To give a sop in times of reorganization of the company. Frequently the holders of bonds which are in a relatively weak position during a company's financial difficulties are forced to accept income or adjustment bonds * in exchange for their old securities. Such new contingent interest bonds are often made convertible into common stock. These sacrificing bondholders are thus assured that, if the company ever becomes prosperous, they may have a chance to participate in these gains.

A convertible feature which is worth anything at all must enable the issuing company to sell the bond at a higher price—that is, at a lower cost than it could have sold a nonconvertible bond. In some instances, undoubtedly, the company could not have sold the bond at all except at a very low price. Ironically, if the company is weak, the common stock is probably also bad. The conversion privilege is then probably worth nothing, but the investor may be enticed by an empty privilege into paying for something which has no value.

The conversion contract. There are, in general, four questions which must be answered by the convertible-bond contract. These are:

1. Into what security is the bond convertible?
2. What is the conversion price?
3. What is the time limit?
4. What are the call provisions of the bond?

1. *Into what security is the bond convertible?* As already mentioned, this is generally common stock.

2. *What is the conversion price?* The convertible bondholder in effect buys stock from his company, paying for it by means of his bonds. The conversion price thus means the amount of par value of convertible bonds required to obtain one share of common stock. Let us assume that the bonds have a par value of $1000 and that the corporation will at any time convert such a bond into common stock at the rate of 10 shares of $100 par value common stock for each $1000 bond. One share of stock requires $100 par value of bonds. The conversion price is in this case $100. A conversion price of $50 would mean that a share of stock can be "bought" by means of $50 par of bonds—that is, a $1000-par bond will command 20 shares of stock.†

* By an income or adjustment bond is meant one on which the interest has to be paid only if earned. Its interest is said to be "contingent on earnings." This form of bond is discussed more fully in Chapter 13.

† Strictly speaking, when a bond has a conversion price of $50, it is the *stock* that really has this price in the exchange process in terms of par value of bonds. In many cases it is more practicable simply to state the number of shares

3. *What is the time limit?* Some convertible bond contracts provide that the conversion may be made at any time. Others place a limit upon the exercise of the privilege. Still others provide for a sliding scale of conversion rates varying with the date. A $1000 bond may, for instance, be convertible into 15 shares of common stock up to the year 1948 and thereafter into 12 shares.

4. *What are the call provisions of the bond?* The convertible bond is generally callable. When the corporation gives a bondholder a chance to become a stockholder, it may, in turn, make the bondholder uncomfortable by forcing him into a decision by the time set for the call. When the conversion privilege approaches the point of being valuable the company may thus in effect cancel it.

Theoretical price situations and the point of conversion. When a corporation has convertible bonds outstanding, an investor can become a common stockholder either by buying the stock directly on the market or by first purchasing the bonds and then converting them into the stock. Let us assume a $1000-par bond is convertible into 10 shares of common stock. If the common stock sells at $120 per share and the bonds at 110 ($1100 for a $1000-par-value bond), the shrewd investor could make $100 by first buying the bond for $1100 and then converting it into $1200 worth of stock. This differential is so "good" that it could not continue. Actually, with good communications and an active market, it could not exist. The bonds would be bid up toward 120, and the increase in the number of shares would tend to cause their price to fall below $120. Even the presence of the call feature with the standard call price of 105 or 110 might not prevent this rise in the price of the bonds, since the call announcement must give adequate notice, often thirty days.

When a corporation has stock which is selling below par, its bonds may not fall at all, or if they do fall the drop will not be so great as that of the stock. The prices of the bonds will tend to be sustained, to some extent at least, by the fact that they represent a prior claim and are promises to pay. If, because of bad earnings records, the $100-par common stock falls to, say, $5 per share, the bonds, likewise dependent upon earnings, may also fall greatly. As long as there is some value in the corporation, however, the bonds are certain to sell at a price above the common stock.

which a $1000-par bond will command, for instance, 20 shares, 40 shares, etc. Thus, a bond with a conversion price of $50 might be said to have an "exchange rate" of 20, that is, 20 shares.

Numerous price conditions are possible. The illustrations and figures just given have been based on a conversion price of $100. If the conversion price is above $100, however, the price of the bond will not rise as high as the price of the stock. Let us say that the conversion price is $200—that is, a $1000-par-value bond can command 5 shares of common stock, or, to put it in another way, the company will "sell" a share of common stock for $200-par value of bonds. A rise in the price of the stock to $210 would tend to push the bond up to 105—that is, $1050 for a $1000-par bond. It will be noted that if 5 shares of stock are worth $1050, the $1000-par bond giving a command over 5 shares will also be worth $1050. If the conversion price is less than $100, the price of the bonds may rise to a point higher than that of the stock. If it is 90, and the price of the stock is 115, the bonds will tend to sell at $115/90 \times 100$, or about $127\frac{3}{4}$.

The process of conversion may tend both to thin out the equity behind a share of common stock and to decrease the earnings per share. Thus, in the illustration in which we assumed the price of the common stock to be $120 and that of the convertible bonds 110, it is probable that the unusual amount of converting will lower the price of the stock below $120 and that the bond and the stock will reach a balance somewhere between the two figures.

One or two price situations will illustrate the problem of determining whether conversion will take place. The old Allis Chalmers Manufacturing Company fifteen-year convertible debentures were made convertible into common stock at $75 up to September 1, 1935, at $80 up to September 1, 1941, at $85 up to September 1, 1943, at $90 up to September 1, 1945, and at $95 to August 1, 1952. If the price of the stock on a certain day in the early part of 1941 was $30 and the price of the bond was 108, would conversion take place? If not, at what prices would the bondholder find it profitable to convert?

The logic of the problem can be stated as follows: A $100-par bond is worth on the market $1080. In return for this bond the holder can get $12\frac{1}{2}$ shares of common stock (that is, $1000 divided by 80 equals $12\frac{1}{2}$. These shares are worth $12\frac{1}{2} \times \$30$ equals $375. Would the bondholder give up $1080 of value to get $375? The conclusion is clear that a person wanting stock would obtain it by direct purchase on the market rather than by the conversion of bonds.

At what point, then, will conversion occur? There are two vari-

ables: the price of the bond and the price of the common stock.* If the stock rises or the bond falls, so that the price of the stock is to the price of the bond as 8 is to 10, conversion will be on the verge of taking place. Thus, if the stock price is 80 and the bond price is 100, or the stock price is 90 and the bond price is $90/80 \times 100$ or 112.50, or if the stock price is $70 and the bond price $70/80 \times 100$ or 87.50, conversion will tend to occur.

Advantages and disadvantages of conversion feature. The chief advantage of the convertible bond to the investor is that it gives him a chance to stand on either side of the fence. When people expect inflation but fear deflation, not knowing what is in store, some tend to regard convertible bonds as a way of facing the problem without making an immediate decision.

Such opportunism and indecision may be expensive. Since a convertible bond has some of the characteristics of a stock, the purchaser may, in effect, pay for a bond and part of a stock. If an investor who is primarily interested in security of money income and principal buys a convertible bond, he is paying an additional price for something he does not want. If, on the other hand, such purchaser is primarily interested in the fact that he has a chance to convert into stock, by buying a bond, he also is paying for something he does not want.† Convertible bonds may and, if the conversion feature is worth anything, should, sell for a price substantially above their actual worth as a fixed-income security. On the market, the price of a convertible bond may rise sympathetically with the rise in the price of the common stock.

As we have already seen, convertible bonds are fairly popular as a hedge against threatened inflation. The conversion price has often been set so high relative to the price of the stock that the conversion privilege has generally been worthless. If the conversion price is $100 and if the common stock sells at $16 and the convertible bond at 96, the price of the stock would have to be multiplied by 6 before conversion would be worth while, assuming no change in the price of the bond. These figures represent a rather typical situation in recent years. If the bond purchaser pays anything extra for the conversion privilege under these circumstances, he is throwing his money away. It is difficult to conclude that he is not paying some-

* The conversion price also changed with time according to a pre-arranged schedule. We are using the price of 80.

† See A. S. Dewing, "A Study of Corporation Securities," Ronald Press, 1934, p. 413.

thing extra, otherwise why would the corporation put such provision in its bond contracts? Since the possibility of conversion is remote, the investor might be better off if he purchased a nonconvertible bond, if he wanted a bond, or common stock, if he wanted common stock.*

The ever-present call provision may be especially disadvantageous to the holder of convertible bonds. The owner of a callable nonconvertible bond will get the proceeds only in cash or, if he makes an exchange with the company, in another similar security carrying a lower interest rate, but the holder of a callable convertible bond faces the risk of being rushed into common stock at a time when its purchase might not be advisable. If many bonds are being converted, those holders not eager to convert may virtually be forced to do so by a realization that the issue may lose its ready marketability as fewer and fewer bonds remain outstanding. A bond which is one of a small issue, even though listed, is generally not as marketable as a bond belonging to a large issue.

The greatest disadvantage of convertible bonds from the standpoint of both the corporation and the stockholders lies in the fact that their existence permits the bondholders to share in the earnings during good times after having had an umbrella held over them during adversity. The stockholders who have stood by the corporation when conditions were poor are forced to share the income with the new stockholders when a period of prosperity comes. The investor who bought convertible bonds during uncertainty and held them until times improved has benefited at the expense of the regular stockholder. The holder of convertible bonds answers this charge, however, by pointing out that whoever bought the bonds from the

* It is being increasingly recognized that the convertible bond is a "treacherous type of security." The author of "When to Buy Convertible Securities" in *Barron's* for January 4, 1943, gives, among others, the following points of advice to the investor considering this form of bond:

1. Find out what you are paying for the conversion privilege. Compare the price of the convertible bond with a nonconvertible of the same company, if possible, or of another company of the same strength.

2. Don't buy convertible bonds unless you think the common stock in that company is attractive. Often weak companies issue convertible bonds.

3. Don't be influenced by the conversion feature if the price relationships and the conversion ratio are such as to make conversion practically an illusion and a future impossibility.

4. Be sure the bond contract contains adequate provisions against dilution.

5. Figure what the earnings per share of common stock would be if all the bonds are converted.

corporation contributed funds to it at a time when the regular stockholders were hesitant or unwilling to purchase more stock. Moreover, the person who originally purchased the bond from the corporation probably paid something extra for the conversion privilege. This additional consideration accrued to the benefit of the stockholders by lowering the cost of the capital to the corporation.

The act of conversion changes a creditor's interest into a proprietary interest. This reduces interest charges but it thereby increases the company's tax bill. The corporation must pay a stock issuance tax in accordance with the law of the state in which it is organized. It loses the privilege of treating the interest as a deduction or business expense under the federal income tax.

The effect of conversion upon the equity of the old common stockholder depends upon circumstances. Corporation *G* has a balance sheet basically as follows:

Assets		Liabilities	
Total	$1,500	Convertible bonds, 5 percent	$500
		Common stock, 5 shares par $100	500
		Surplus	500

The book value of a share of stock is $200. Let us suppose now that the bonds are convertible into stock at a price of $100 and that conversion takes place. The bonds disappear from the balance sheet and 5 additional shares of common stock take their place. The balance sheet now appears as:

Assets		Liabilities	
Total	$1,500	Common stock, 10 shares par $100	$1,000
		Surplus	500

The book value is now $150.

If the conversion price is $50, the effects will be different. In that event in return for the $500 of bonds the holder will receive 10 shares of common stock of a par value of $100 each. The balance sheet will thus appear:

Assets		Liabilities	
Total....................	$1,500	Stock, 15 shares par $100..	$1,500
		Surplus..............	0

The book value will now be only $100 per share. The conversion has wiped out the surplus of the common stockholder.

Let us suppose, next, that the conversion price is $200, with conversion taking place. The $500 of bonds in that case is changed into 2.5 shares of common stock, or $250 par value. The balance sheet now appears:

Assets		Liabilities	
Total....................	$1,500	Common stock, 7.5 shares .	$750
		Surplus	750

The book value remains at $200. If the conversion price had been $500 there would after the conversion be 6 shares of common stock with a total proprietary interest of $1500 or a book value of $250 per share.

From these illustrations we can draw a conclusion. If the conversion price is a figure less than the book value of the stock, the process of conversion will tend to reduce the book value per share of common stock. The lower the conversion price, the greater will be the reduction. If, instead, the conversion price is above the old book value of the stock, the conversion will tend to thicken the equity per share of common stock. If the conversion price is the same as the book value, the equity per share of common stock will be unchanged.

The effect of conversion upon the earnings per share of the common stock will depend both upon the conversion rate and upon the relation between the coupon rate of the bonds and the earnings on the common. Returning to the original balance sheet of *G* let us suppose that the net income before the payment of interest on the 5-percent convertible bonds is $50. The interest requirement being $25, the balance for the common stock is $25, or $5 per share. This amounts to 2.5 percent on the total common stock equity of $1000. Conversion of all the bonds at a price of $100 would increase the

number of shares to 10, but would eliminate the interest charge. The net income would then be $50, or a return of 3.33 percent on the total common stock equity, which now would be $1500.

Conversion at a price of $200 would make the earnings per share $6.67 (that is, $50 divided by 7.5 shares), but the return on the common stock investment would remain at 3.33 percent. Conversion at a price of $50 would make the earnings per share $3.33 and the return on the common stock investment also 3.33 percent. If the earnings before interest were $100, the earnings per share of common stock would originally be $15, but the conversion at $100 would lower this to $10, the conversion at $200 would bring it to $13.33, the conversion at $50 would make it $6.67.

Protection against dilution. Convertible-bond contracts generally protect the bondholders against dilution of the common stock into which the bonds are convertible. The value of the privilege must be preserved. This does not mean, of course, that stock cannot deteriorate or depreciate because of business losses. There can be no protection against such risks. The provision protecting against dilution is intended to protect against thinning out the value of a share of common stock by various arbitrary acts, the chief of which is the increase in the total number of shares without the receipt of appropriate value by the corporation.

To illustrate such protection against dilution, let us say that the common stock has a book value of $200 and that the earnings per share are $15. The convertible bonds have a conversion price of $100, which means that a $1000-par bond is convertible into 10 shares of common stock. The company now doubles the number of outstanding common shares by distributing a stock dividend of 100 percent. Since the company receives nothing in return for these shares, the book value per share immediately becomes $100 and the earnings per share $7.50. The price on the market of such stock is mathematically and theoretically reduced by one half.* The provision protecting against dilution as found in the typical convertible-bond contract would state that the bondholder, after the stock dividend, will be allowed 20, instead of 10, shares in exchange for a $1000-par bond. In other words, the conversion price would be lowered to $50. If new stock is issued and sold at a price substantially

* The effect of adjustments in the number of shares upon the market price of the stock will be discussed in the next chapter.

lower than the existing bond conversion price, an adjustment may also have to be made.*

The convertible bond and manipulation. The convertible bond has sometimes been used as an instrument of financial manipulation. As treasurer of the Erie Railway, Daniel Drew in 1866 lent $3,500,000 to his own company upon the security of 28,000 shares of its authorized stock and upon $3,000,000 par value Erie bonds convertible at the option of the holder into Erie stock at a conversion price of 100. Drew and his collaborators, Jay Gould and James Fisk, sold Erie stock short. Vanderbilt, the bull operator who hoped to catch his old financial enemies in a corner, bought all the stock that was offered. Drew sold, Vanderbilt bought. The market was buoyant, Erie was even rising. Everybody thought Drew had sold more stock than he could later deliver and that this time Vanderbilt had caught the cunning and much-feared Drew in his trap.

But let Charles Francis Adams finish the story:

> Treasurer Drew laid his hands upon his collateral. In an instant the bonds for $3,000,000 were converted into an equivalent amount of capital stock and fifty-eight thousand † shares, dumped, as it were, by the cartload in Broad Street, made Erie as plentiful as even Drew could desire. Before the astonished bulls could rally their faculties the quotations had fallen from 95 to 50 and they realized that they were hopelessly entrapped. ‡

* A corporation has convertible bonds outstanding with a conversion price $50—that is, the bondholder may receive 20 shares of common stock in return for a $1000-par bond. There are 10,000 shares of common stock outstanding. The basic price of these shares may be said to be

$$\frac{10{,}000 \times \$50}{10{,}000} = \$50.$$

The company now issues and sells 6000 additional shares for cash at $30 per share, which is $20 below the conversion price set in the bond contract. This sale of additional common stock may be said to thin out the equity behind a share of common stock relative to the conversion price. The new conversion price should then become

$$\frac{10{,}000 \times \$50 + 6000 \times \$30}{10{,}000 + 6000} = \$42.50.$$

† The collateral was $3,000,000 convertible bonds and 28,000 shares of stock. At a conversion price of $100 the convertible bonds gave 30,000 shares. The total that Drew could dump was thus 58,000 shares.

‡ The account of this transaction, which was followed by others of a more or less similar nature, is taken mainly from Charles F. Adams' article, "A Chapter of Erie," *North American Review,* Vol. 109 (1869). The quotation is from page 34. Robert I. Warshow in *Jay Gould—The Story of a Fortune,* Greenberg, 1928, pp. 69-73, also gives the story of this and other clashes be-

Summary. At certain times the conversion feature is very popular. Its use may be stimulated by the possibility of inflation and by the fact that an uncertain purchaser may attempt to hedge by straddling the fence. This privilege is sometimes used as a selling point to issue and dispose of securities which otherwise could probably not be sold to advantage. One of its most common uses is in the case of a reorganization in which holders of senior securities may be given junior bonds or preferred stock. The conversion privilege is often tacked onto these junior securities as a sop to the disappointed investors.

The question of whether a bond will actually be converted is mainly one of arithmetic. If the conversion ratio or price and the relative price of the convertible bond and of the stock into which it is convertible are such that the holder of the bond will improve his position by converting, he will take this step. If, on the other hand, relative prices of the bonds and the stock do not favor conversion, he will not convert. Conversion amounts to letting former bondholders share with the old stockholders in the residual profits and assets of the corporation. When the bonds are converted, the company rids itself of the obligation to pay interest. On the other hand, while the net income after interest is increased through the act of conversion, such residual earnings are distributed among a greater number of shares than before. As a general rule, if the conversion price is less than the book value of the common stock, the process of conversion will tend to thin out the equity per share. The effect upon the earnings per share will depend not only upon the conversion rate but

tween Vanderbilt and Drew. See also W. Z. Ripley, *Railway Problems,* Ginn & Co., 1907, Ch. I. The reader is referred especially to Chapter 12 of Bouck White, *The Book of Daniel Drew,* George H. Doran Company, 1910. This book is a highly interesting account of many of the financial episodes of the time of Drew.

It will be noted in this episode that Vanderbilt was a "bull." A bull buys securities or commodities hoping that they will rise. Drew was a "bear." A bear sells short, hoping that after he has sold, the prices will go down so that he can "cover"—that is, buy the shares to be delivered at a lower price—thus making a profit on the fall of the price. If Drew had not been able to dump the 58,000 shares, the market might have stayed up and he would have been forced to buy shares at a high price. Stock-exchange rules today require that deliveries of all stock sold be made on the second day following the sale. The short seller borrows the stock on a proper margin from his broker and delivers it. The covering takes the form of buying the shares later to repay the loan of the stock. If there is not enough stock available for the short sellers to cover or repay this loan, they may be said to be cornered. In this case the bulls may be able to squeeze the bears—that is, raise the price at which they will be willing to settle.

also upon the relation between the coupon rate of the convertible bonds and the earnings on the common stock into which they are converted.

Convertible bond contracts generally contain a clause protecting the bondholders against dilution of the common stock. If a $1000-par bond is convertible into 10 shares of common stock—that is, the conversion price is $100—the issuance of a stock dividend of 100 percent would necessitate a change in the number of shares received for a $1000-bond from 10 to 20. This would be the same as lowering the conversion price from $100 to $50. Other checks against dilution are also frequently found.

Convertible bonds are not an undiluted advantage to the investor. The purchaser is paying for a bond *and* for some of the characteristics of a stock. If he is primarily interested in a bond, he is paying extra for the right to acquire the stock. If the investor wants a stock, the purchase of a convertible bond may be an expensive way of securing it because he would be paying for some of the characteristics of a bond. The convertible bond is a treacherous form of security. In purchasing such bonds the investor should attempt to find out what he is paying for the conversion privilege. If the conversion price and the relative market prices of the bond and of the stock are such that the possibility of conversion is remote, he might do better to buy either an ordinary bond or a share of common stock.

PROBLEMS

1. A company has two bond issues outstanding. The one is convertible (conversion price $40) and the other is not. The coupon rate on both is 4 percent. Both are callable at 105. Both are of the same high-grade investment quality. The stock-market booms, and the stock of our company hits 42 and is still strong. The nonconvertible bond reaches 109, but at this point the call feature tends to hold its price down. The price of the convertible bond is rising sympathetically with that of the stock. Will the call feature of the convertible bond necessarily have the same effect?

2. Bearing in mind the nature of the public-utility industry and the fact that its rates are regulated by public authority, would you expect the conversion feature in such bonds to be a good protection or hedge against inflation or rising commodity prices?

What would you say in this respect as to convertible bonds issued by an industrial company owning all its raw materials?

3. The authorized capital stock (common) of American Telephone and Telegraph Company is 35,000,000 shares. Of these, 20,789,928 shares were outstanding on April 30, 1947, according to Moody's *Manual*. Enough shares were reserved for the conversion of the two convertible debenture issues outstanding at that time. The $39,047,-900 par of convertible debentures of 1956 were convertible into common stock at $140—that is, the conversion price was $140 per share payable by surrender of $100 par of the debentures plus payment of enough cash to make up the difference between the conversion price and $100. The $327,311,300 par value of convertible debentures of 1961 were convertible into common stock at a conversion price of $150 per share payable in $100 par value of the bonds and the balance in cash.

a. How many such shares of common stock were reserved at that time for the possible conversion?
b. The convertible debentures of 1956 were called for payment September 1, 1947, at 104 and interest, the right to convert into stock expiring on the close of business of that date. If the common stock was selling on September 1 at 142, would you have converted, this being the last chance?
c. When these bonds were first offered or issued by the company, would the stockholders have had a pre-emptive right? (The laws of New York, under which the company was incorporated, recognizes in general the principle of the pre-emptive right.)
d. The convertible bonds are protected against material dilution. What common forms does such protection take? (Sections 4.04 and 4.05 of the indenture of the convertible debentures of this company contain rather complex provisions for such protection, and the conversion ratio is to be adjusted according to a specified formula.) Using the source indicated in problem 6 of Chapters 4 and 5, find some illustration of a convertible bond or preferred stock and note the exact provision against dilution, if given.

4. In a case of a certain convertible bond the conversion price is $50. The conversion privilege is protected against dilution. Such protection generally applies not only to stock dividends and split-ups, but also to the sale of new additional shares of common stock at a price below the conversion price. There are 80,000 shares outstanding. The company now issues and sells 20,000 additional shares for cash at $40 per share. What would be the revised or new conversion

price according to this rule? Assume next that the company sells 25,000 more shares at $30 per share. What would now be the revised or conversion price? Next, the company issues a stock dividend of 100 percent. What would now be the revised conversion price?

5. The following shows the pertinent facts for several convertible preferred stocks. By the conversion point is meant the price at which the common stock would have to sell before conversion would be profitable.

Preferred stock and rate of dividend	Number of shares of common for each share of preferred	Recent price of common	Recent price of preferred	Conversion point
Curtiss-Wright A $2.....	1	6	18	18
Crucible Steel $5 ..	2	30	80	40
Hershey Chocolate $4 . ..	1	34	122	..
Minneapolis-Honeywell $3.20...............	1.33	$61\frac{1}{2}$	105	..
Standard Steel Spring $2 .	2.22	$14\frac{7}{8}$	$45\frac{1}{8}$	..

a. Find the three conversion points not given in the table.

b. These conversion points assume the price of the preferred to remain unchanged. If the price of Crucible preferred became 105, what would be the conversion point?

c. Crucible Steel preferred is callable at 110. Suppose the common price went up steadily past 55 and 60 and 75, would this call price hold down the price of the preferred?

d. Find other illustrations of convertible preferred stocks (or bonds) and consult the daily market records for recent quotations. Then make computations similar to those in this table.

6. A corporation has assets of $400,000. On the right-hand side of the balance sheet are the following: common stock, 3000 shares, par $50; 5-percent convertible bonds par $100,000 (conversion price $50); accounts payable $50,000; surplus (the rest). The income, after all costs and expenses and all taxes but before interest on the bonds, is $35,000.

What is the rate of return on the total long-term investment? The earnings per share of common stock? The book value per share of common stock? Assume now that all the bonds are converted. What is now the rate of return on the investment? The earnings

per share of common stock? The book value per share of common stock? Referring to the original figures, indicate whether you think that the fact that this company is doing considerable trading on the equity is profitable to the stockholders. What would be your answer if the income was $10,000 instead of $35,000? What amount of income constitutes the dividing line between profitable and unprofitable trading on the equity?

Chapter 12

Changes of the Capital Structure—Recapitalization

A COMPANY may obtain its assets in two general ways: (1) from individuals who have advanced funds on a short-time basis; and (2) from individuals who have advanced funds on a long-time or permanent basis. The first of these sources is represented by current liabilities of various kinds, the second by the outstanding bonds and stocks. The stockholders may have contributed directly by their original investment or they may have contributed funds indirectly through the fact that the corporation has retained earnings as surplus and surplus reserves instead of paying them out as dividends.

Undercapitalization versus overcapitalization. If we now proceed to subtract the current liabilities from the sum of the current assets plus the net fixed assets (their value after depreciation), we arrive at a figure which is often described as the value of the long-term investment, or called simply "investment." By comparing this figure with the par value of the stocks and bonds (stated value in the case of no-par stock), we determine whether a corporation is overcapitalized or undercapitalized. If the real or actual value of the investment is greater than the par value (or if no-par, the stated value) of the outstanding securities, the corporation is undercapitalized. If, on the other hand, the assets representing this investment are worth less than the total par of the outstanding securities, we say that the corporation is overcapitalized, or that its stock is watered. For all practical purposes, the value of these assets may be referred to as the value of the business as a going concern. Recapitalization may be necessary or advisable in either circumstance.*

Corporation *G* has the following balance sheet:

* For an illustration of recapitalization, see Appendix G.

Assets		Liabilities	
Net value of fixed assets (that is, value after depreciation)	$750,000	First mortgage bonds, 5 percent	$ 50,000
Other assets, mainly current assets or working capital	150,000	Current liabilities	50,000
		Preferred stock, 6 percent	100,000
		Common stock, 3000 shares, par $100	300,000
		Surplus	400,000
	$900,000		$900,000

The profit and loss statements show that this company has been earning an average net income of $45,000 before the payment of interest but after paying or making allowance for all taxes, including those on income. The net has been fairly steady, ranging from $40,000 to $60,000 over a period of ten years. According to the best accepted predictions these earnings will continue into the future and may even improve.

Is this company over- or undercapitalized, or is there about an even balance between the value of the investment and the total par of the stocks and bonds? In arriving at the answer, the big problem is the determination of the value of the business. One way of doing this is through the use of the capitalization process.* If we capitalize the $45,000 income at 6 percent, the resulting value of the business would seem to be $750,000.† This gives a figure close to the value of the assets over and above the current liabilities as given on the books. The value of the investment as recorded is $900,000 (we are

* Refer to Chapter 9 for a discussion of the nature and philosophy of the process of capitalization.

† There are other ways of evaluating a business besides the capitalization process. Indeed, this method cannot be used to fix the value of a utility company for rate-making purposes. If the regulatory commission capitalized the net income after all expenses and taxes but before interest at a reasonable rate in order to arrive at the value of the investment of a certain utility and then permitted it to set its rates on a level which would give that percentage on the investment the whole process would involve circular reasoning. What the company does earn would then determine the amount that it should earn. Consequently other methods, rather than the capitalization process, have been evolved for the evaluation of utility investment. These are mainly historical cost or original investment, cost of reproduction less depreciation, and prudent investment. All of these are used at times in varying mixtures. See Chapter 29 for a further discussion of the effect of the holding company upon the problem of utility rate making.

considering all "other assets" as current or bona fide assets) minus $50,000 of current liabilities, or $850,000. Because the income of the company has been fairly stable and will probably continue so in the future, and since the current market interest rates are extremely low, some analysts might be willing to capitalize the income at 5.5 percent or even at a lower rate. Thus, a good argument could be put up for setting the reasonable value of the business, or of the investment, at even $800,000 to $900,000.

Since the reasonable value of the investment—say a minimum of $750,000—exceeds the par value of the outstanding long-term securities of $450,000 by a considerable sum, namely $300,000, Company *G* is undercapitalized. The return on the total capitalization, as we shall see shortly, bears out this conclusion.

Causes of undercapitalization. A company could have come into this condition of undercapitalization in one or more of the following normal ways:

1. It may have earned over the years a large net income, only a part of which was paid out to the stockholders. The balance of the earnings was probably put into improved plant and equipment. The company may in such case be said to have "put on fat."

2. The company may have sold some of its stocks and bonds to the investing public at a price above par. The amount received by the company would then have added more to the value of the assets than the issuance of the securities added to the total par value outstanding.

3. The company may have sold some of its equipment or buildings at a profit, that is, at a price above the value of these items on the books.

4. The company may have appreciated or marked up the value of its plant in response to the increasing prosperity of the company. Since the property is worth more, why not mark it up? may have been the argument of the management. Incidentally, accountants do not approve of such write-ups, since the gain has not been realized. At least, they say, if such a write-up is made, the resulting surplus should be designated "appreciation surplus" and should not form the basis of cash dividends.

Disadvantages of undercapitalization. Though the condition of being undercapitalized may in general appear to be a happy one, there are disadvantages. There may, for instance, be political or psychological effects. It will be noted that this company has earned 10 percent on its capitalization, or on the par value of the stocks and bonds, as

we are using the word capitalization in this connection. The earnings per share of common stock are $12.17.* If one uses a capitalization rate of 8 percent, or, as many would put it, a multiplier of 12.5, one concludes that the market price of this common stock could be about $152. This is, of course, a purely theoretical figure, a starting point for a market estimate. The actual price may be higher or lower, depending on numerous economic, political, and psychological influences. The rate of dividend, as well as the earnings per share, has an important effect on the price of the stock. Many analysts capitalize the dividend rate rather than the rate of earnings.

As different groups of people view these figures, they may have different reactions. Labor leaders may think the company is exploiting by not paying higher wages. Consumers may think the company is charging too much for its product. Stockholders may complain that the company has been paying out too little in dividends. Politicians may cry about the business not having a social conscience. The tax collector may consider the company able to pay more taxes, perhaps because it has withheld an unreasonable proportion of its earnings. The company itself may think the stock is selling at too high a price to appeal to the typical investor.

Elimination of undercapitalization. Accordingly, for various reasons, the company may decide to get rid of this surplus. It can do so in three general ways:

1. Write down the value of the assets on its books.
2. Pay out a substantial cash or property dividend.
3. Recapitalize, that is adjust the number or par value of the outstanding stocks without a corresponding change in the assets.†

Since the value of the assets as given on the corporate books seems to be justified by its earnings records, there would be no point in doing number 1, though, of course, the company might take this occasion to create a large hidden or secret reserve. ‡ The presumption

* These figures are computed as follows: Total capitalization is $450,000 ($300,000 common and $100,000 preferred stock plus $50,000 bonds). This figure divided into the net of $45,000 gives 10-percent return on capitalization. Total net income minus $2500 interest on bonds and minus $6000 preferred dividends gives $36,500 available for common stock. $36,500 divided by 3000 shares equals $12.17 per share.

† For further discussion of transactions affecting surplus, see Chapter 14.

‡ A secret reserve is generally created by charging capital expenditures to expense accounts. This process records the total expenses as a higher figure than they should be, and thus understates profits or income. The same result might be accomplished by arbitrarily keeping the value of the assets down or by even omitting an asset from the books. In the long run, of course, such

against number 2 would be strong since the company may not be able to spare large quantities of its cash or other assets. If the assets are profitably used in the business, which seems to be the case in our illustration, it would be suicidal to dispose of too many of them. Moreover, it would hardly be practicable or desirable to hand to each stockholder a part of the physical plant.

These considerations leave number 3, namely recapitalization, as the only feasible or practicable method of adjustment.

There are two general ways of increasing the amount of the capitalization without a corresponding receipt of assets: (1) increase the par value of the outstanding stock; (2) increase the number of outstanding shares of common stock.* An increase in the par value of the common stock from $100 to, say, $200, however, would be rather futile. Since such step would not affect the number of shares outstanding, the earnings per share would remain unchanged. The rate of earnings on the total capitalization, it is true, would fall from 10 percent to 6 percent, but the price of the stock on the market would probably not be substantially affected.

This leaves an increase in the number of shares of common stock as the only feasible course of action. There are two general ways of doing this: the stock split-up or the stock dividend.

Stock split-up. If the corporation distributed to the old stockholders an extra 3000 shares of common stock—that is, if it gave 2 new shares in exchange for each old share—and simultaneously reduced the par value in inverse ratio to the increase in shares—$100 to $50—we would have an example of a stock split-up. In the trade, this would be called a 2 for 1 split. There would then be 6000 shares of $50-par stock instead of 3000 shares of $100-par. The total par of the outstanding stock would still be $300,000, however, and the total capitalization, including the preferred stock and the bonds, $450,000. The surplus would not be affected. The asset side of the balance sheet would not be changed in any way. The earnings per share of common stock would, of course, be cut in two, and the probable market price

understatement of assets would reduce the allowable depreciation and, therefore, might ultimately increase the net income above that which it would have been. The English often use the term "inner reserve" rather than secret reserve.

* Though it would be theoretically possible to increase the par value of the bonds or preferred stock or to raise the number of such bonds and preferred stocks outstanding—that is, to hand these holders a gift—the common stockholders, who are the residual claimants, would hardly consider such a philanthropic gesture seriously. Therefore, we are excluding any adjustment of the preferred stock or the bonds.

of a share of common stock would be similarly reduced. But the rate of earnings on the total capitalization, which would still be $450,000, would remain the same as before. If the par value were scaled down less proportionally than the increase in the number of shares—for instance, if it were reduced only to $75—the total capitalization and surplus would naturally be affected.

Stock dividend. The term "stock dividend" generally refers to the distribution of additional shares of stock of the same par value in amounts bearing a designated ratio to the number of old shares. The company receives nothing for these extra shares, nor does it pay out anything. As in the case of the split-up, the asset side of the balance sheet remains in all respects unaffected by these adjustments.* In our illustration, if the company distributes a stock dividend of 100 percent, the common stock is increased to 6000 shares, or a total par value of $600,000, and the surplus is reduced to $100,000. The return on the total capitalization of $750,000 (it will be recalled that the net income before payment of interest is $45,000) is now 6 percent instead of 10 percent, the earnings per share of common stock are reduced from $12.17 to $6.085, the book value becomes $116.67 instead of $233.33. A stockholder who formerly held 1 share earning $12.17, which capitalized at 8 percent was theoretically worth about $152 now holds 2 shares, each earning $6.085 and worth about $76. The proportional interest of this stockholder, as of every stockholder, would be the same as it was before the distribution of this stock dividend.

Dividends as income. One of the theoretical questions that long bothered students of finance was whether the receipt of a stock dividend by an individual constitutes income? Men of affairs worried little about this problem which was considered fit only for the dusty brains of economists. But by the 16th Amendment to the United States Constitution, proclaimed in 1913, Congress was given the power to tax income from whatever source derived without apportionment according to population among the states. Congress then attempted to tax stock dividends as income. The problem as to the nature of such a dividend now came squarely before the men

* If the company attempts to maintain the same rate of dividend on the common stock, the ultimate effect, of course, may be a reduction of the cash and working assets. If the company cuts the dividend rate per share in exactly the same proportion as the total shares are increased, the working capital will not, theoretically, be affected. The company often maintains an "in between policy."

of affairs. If stock dividends are income, they may be taxed by Congress; if not income, they may not be taxed by Congress.*

The Supreme Court of the United States in 1920 held that the distribution of stock dividends did not constitute income to the recipient and that such dividends were not, therefore, subject to the federal income tax law. The stockholders' interest in the company is not changed by such distribution, said the Supreme Court. Moreover, nothing of value is separated from the corporation by such dividend.† In a later decision ‡ the Supreme Court drew a distinction between the various types of stock dividends, holding that where such dividend gives the stockholder an interest different from that which his former stockholdings represented, the value of the stocks so received is income even though no separation of any assets is made. Still later the Court, by a split decision,§ refused to reconsider its basic decision in the *Eisner* v. *Macomber* case.

There has been much litigation and much difference of opinion on this question, but several lower court and tax board decisions, coupled with those of the United States Supreme Court just mentioned, permit the formulation of the following general rule as to the taxation of stock dividends. If the additional stock issued as a result of the stock dividend has the same rights and characteristics as the common stock on which it is declared, there is no income from such distribution, since the proportionate interest of the common stockholders in the earnings and in the book values is not changed. If, on the other hand, the characteristics and rights of the stock distributed are materially different from those of the stock on which it is declared, there may be income, since in that event, the interest

* Congress could, of course, levy a direct tax in proportion to the number of people in each state. This restriction on the use of direct taxes had the effect of virtually prohibiting Congress from levying such taxes until the 16th Amendment was put into effect.

† *Eisner* v. *Macomber* (1920), 252 U. S. 189.

‡ *Koshland* v. *Helvering* (1936), 298 U. S. 441.

§ *Helvering* v. *Griffiths* (1943), 318 U. S. 371. Justice Douglas, supported by Justices Black and Murphy, wrote the dissenting opinion, in which he advanced the arguments that the accumulation of income over a period of time without its distribution to the stockholders really marks a real accrual of wealth to the corporation. Indirectly a benefit accrues to the stockholder, whose holdings are thereby increased in value. The distribution of a stock dividend does not by itself increase the property of the stockholder; rather, the increase occurred before that event. Moreover Justice Douglas pointed out that there are many cases of the stockholder indirectly receiving income even though nothing has been removed from the corporation or nothing has been received by the stockholder. The cancellation of a corporate debt or tax bill through a reorganization process or settlement would be an illustration.

and proportionate share in the corporation of the recipient may be substantially changed. Thus, if the stock dividends declared to the holders of common stock are in the form of preferred stock of a type already issued and outstanding, such dividends constitute income. Similarly, a stock dividend in the form of common stock to the holders of preferred stock also is income.*

There will be taxable income, however, if a stockholder sells his stock dividends at a profit. Assume that Mr. *A* bought 100 shares of a certain common stock at $80 per share. Subsequently the company declared and distributed a stock dividend of 100 percent, the new stock distributed being similar in all rights and privileges to the common stock already outstanding. This stock dividend as such is not taxable. Mr. *A* now has 200 shares of common stock instead of 100. But he later sells 40 shares at $90 per share. To compute the amount of any taxable gain it is necessary to start with the "basis" or cost of the stock. The basis is not $80 per share, but rather a figure arrived at by dividing $80 by the sum of 100 percent plus the rate of the stock dividend, that is $80 divided by 200 percent equals $40.† The capital gain is, therefore, $90 minus $40, or $50, for each share sold. The principle may also be stated in this way: When a stockholder sold 40 out of his total of 200 shares, he disposed of one fifth of his total investment—that is, $\frac{1}{5} \times \$8000$ or $1600 cost price. He sold these shares for $3600, a gain of $2000 or $50 per share.

If, on the other hand, the stock dividends given to *A* had been in the form of preferred stock of a type already existing, the value of these shares would immediately become income to *A*. If the dividend were 10 percent, *A* would receive 10 shares of preferred stock. If these at that time had a market price of $110 per share, the tax-

* An interesting question arises in a situation such as this: Suppose there is no preferred stock outstanding. The directors then provide for the issuance of preferred stock and give all these new shares to the holders of the common stock in proportion to their holdings. It is clear that, if there had been preferred stock previously outstanding and the directors then handed out some additional preferred shares as a stock dividend to the common holders, the position of the common stockholders would be altered. But if there had been no previous preferred stock, will the distribution of new preferred stock to the common holders change their relative interest in the corporation? There is some uncertainty as to this. This is one of the points requiring further clarification by Congress.

† If the stock dividend had been 50 percent, the cost of $80 would be divided by the sum of 100 percent plus 50 percent or 150 percent. This would give $53.33. The same result would be obtained by dividing $80 by 1.5. The profit on each share sold would then be $90 minus $53.33 or $36.67.

able income would be $1100. If Mr. *A* later sells some of his common stock, no adjustment in its basis or cost value will be made. Its cost "basis" remains $80 per share.

Now we come to another interesting question of theory: If the customary stock dividend is not income, why does a *cash* dividend constitute income? Because, it is said, the cash dividend gives the stockholder something of value—cash—which has been separated from the corporation and has been placed under his control. But let us refer to our original corporation, whose balance sheet is given near the beginning of this chapter. The book value of a share of common stock is $233.33. If the corporation pays out a cash dividend of $25 per share, the effect is to reduce cash by $75,000 and surplus by $75,000. The total assets now are reduced to $825,000. The company has that much less to work with. The book value of a share of common stock now becomes $\frac{\$625,000}{3,000}$ or $208.33.

While the stockholder has received an "income" of $25 in cash, the book value of his stock has simultaneously been decreased by $25. Through the loss of assets the earning power of the company presumably is also reduced, and the earnings per share may also be decreased to below what they would have been without the distribution. A good debate could be staged on the question of whether a cash dividend is income to the stockholder any more than the stock dividend. In the case of the stock dividend the stockholder gets nothing, the corporation loses nothing. In the cash dividend, the stockholder gets something, but he indirectly loses the same amount. The difficulty in our concept of income lies in the fact that the stockholder is both separate from and a part of his corporation.

The choice of method of recapitalization will depend upon the purpose which the management wishes to accomplish by the program. Increasing the par value to $200, with no change in the number of shares outstanding, will reduce the rate of the earnings on the total capitalization and on the common stock par value, but it will not change the earnings or book value per share and will not have any immediate direct effect on the price of the stock. The increase of the number of shares, with a corresponding reduction in the par value, technically known as a stock split-up, will result in no change in the rate of earnings on the total capitalization, but it will reduce the book values and the earnings per share and will also lower the market price.

The third method, or the stock dividend, is most frequently used in situations of this kind. It reduces both the earnings per share and the rate of earnings on the total capitalization and also lowers both the book and the market value of the stock.* Various combinations are also possible.

Eliminating overcapitalization. Bad times come upon a company. Some of its assets are destroyed without adequate insurance. Parts of its plant become hopelessly inadequate and obsolete. The company may have endangered its working capital position by paying out too many cash dividends and may also have thinned out its surplus by excessive stock dividends. To cap the unfortunate chain of circumstances, a business depression hits the country.

The average net income before interest on the bonds but after all costs, expenses, and taxes has hit a low of $12,000 and may even fall considerably below that figure. The company's balance sheet at the time is as follows:

Assets		Liabilities	
Net value of plant as listed on the corporation books..........	$700,000	Bonds, 5 percent.........	$ 50,000
		Current liabilities......	50,000
		Preferred stock, 6 percent	100,000
Other assets including current assets.........	150,000	Common stock, 6000 shares, par $100.......	600,000
		Surplus...............	50,000
Total.............	$850,000	Total	$850,000

A glance at the balance sheet and income figures shows that something is wrong. If we estimate the probable future earnings at $12,-

* The theoretical price or book value of the stock after the recapitalization may be computed by the use of a formula made up as follows:

$$\frac{100\%}{100\% + \text{rate of stock dividend or split-up}} \times \text{old figure.}$$

Thus, in the event of a stock dividend of 100 percent, the new theoretical price will be:

$$\frac{100\%}{100\% + 100\%} \times \text{old price.}$$

If the stock dividend were 50 percent the fraction would be (omitting percentage signs):

$$\frac{100}{100 + 50} \times \text{old price.}$$

000 and capitalize them at 8 percent,* we get a valuation of the business of about $150,000, compared with $800,000 on the corporate records. (Assets of $850,000 minus current liabilities of $50,000 give $800,000 as the value of the investment on the books.) These values for the investment are clearly too high, the amount of the overstatement being, of course, a matter of opinion and estimates by engineers and accounting and valuation experts. The earnings will certainly not support the valuation as given on the books. The total par value of the bonds and stocks ($750,000) is clearly in excess of the probable business and investment value of $150,000 arrived at by the capitalization of the income. The company is badly overcapitalized.

As we compute the return on the securities we arrive at a similar conclusion. If the net earnings before interest are $12,000, the earnings on the common stock are only 58¢ per share. The rate of return on the entire capitalization is only 1.6 percent. These rates are far below the minimum of respectability. The assets look glossy and fat on the books, but they are really thin and emaciated. Like Daniel Drew's cattle, they are greatly watered.†

There are two general methods of squeezing out the water: (1)

* Eight percent may be too low a percentage in view of the bad prospects for the company. Conservative financial authorities suggested that even in the boom year of 1929 an electric utility stock involving little risk would sell on "a 6- or 7- up to a 10-percent level on the basis of earnings before depreciation and a railroad stock would similarly sell at 8 or 8.5 percent, while a large industrial corporation stock with only a moderate amount of risk would be worth about five times its earnings." (That is a capitalization rate of 20 percent.) The Securities and Exchange Commission, in evaluating businesses for purpose of reorganization, has frequently allowed a rate of 8 to 12 percent for even a comparatively "bad risk," though it has fixed above 12 percent for "sick babies." H. L. Jome, "The New Schoolmaster in Finance," *Michigan Law Review,* Vol. 40 (March 1942), pp. 625-53.

† Daniel Drew drove a herd of cattle, thin as usual, toward New York and put up for the night at a point near where the Boston Road (Third Avenue) would now intersect 125th Street. Henry Astor, a New York butcher, was to inspect the cattle the next day. During the night Drew strewed salt on the ground for the cattle, keeping them away from water. The next morning he drove the thirsting animals slowly into New York. Shortly before Astor came to inspect, Drew turned the cattle loose on water. Astor was so impressed at their plumpness and glossiness that he paid a good price. Drew was so pleased with his "stock-watering deal," as he called it, that he concluded: "If a fellow can make money selling a critter just after she has drunk up fifty pounds of water, what can't he make by issuing a lot of new shares of a railroad or steamboat company, and then selling this just as though it was the original shares?" Bouck White, *The Book of Daniel Drew,* George H. Doran Company, 1910, Chapters VI and VII. The quotation is on page 59.

Put some fat on the corporate bones; (2) Reduce the capitalization. If the former seems too remote or impracticable, the corporation may resort to the second method.

Let us make a rough comparison. A boy aged 12 weighing 100 pounds finds himself with a suit of clothes intended for a boy of 15 weighing 125 pounds. The boy is "overfitted" with clothes. How can the excess be eliminated? The answer lies in two directions: (1) Let the boy "grow into" the clothes—that is, make the body fit the suit; (2) Cut out or remove the excess cloth—that is, make the suit fit the body. Perhaps one who understands growing boys will say that, since boys do grow, a reasonable combination of the two methods may represent the best choice. A suit exactly fitting a young growing boy would soon develop a state of "undercapitalization" and as the "bulges" begin to appear his mother would have to let out the seams, or increase the size of the suit.

A corporation can do exactly as the boy. It may grow into the suit. The usual way of doing this is to put on fat by withholding earnings. Many corporations start their career in a somewhat watered condition largely because they may have been forced to dispose of their first securities in return for property worth considerably less than the par values. Given an opportunity, they may grow into their clothes. If, however, the discrepancy has become abnormally large and is of a nature that probably never can be wiped out, it may be advisable to cut the suit. The cutting of the suit represents a common and important phase of recapitalization, which is often called decapitalization.

Decapitalization is in general the opposite of increasing the capitalization or of "letting out the seams," but it is a much more painful process. Stockholders are often jubilant over stock dividends and split-ups and consider them as evidence of great prosperity of the company. During the rejoicing the market value of the new shares has sometimes risen quickly and swiftly to a point substantially above their theoretical or arithmetical value.*

* Many corporations have in recent years distributed stock split-ups mainly in order to broaden the market for their stock. They wanted to take advantage of the peculiar quirk in human nature whereby a person will pay $40 for one quarter of a share but will not pay $160 for a full share. Though such split-ups do not alter the position of a stockholder, the market often responded enthusiastically. Sears, Roebuck & Company, for instance, handed out a 4 for 1 split-up, that is the holder of 1 share got 4 shares instead of his one. He really received three additional shares. Shortly before the action the stock was selling for about $120. Mathematically, the stock on the new basis should sell for

The squeezing out of the water, or decapitalization, on the other hand, is often a sad occasion, and many stockholders may object to the adjustment.* Strictly speaking, the decapitalization, often called the stock dividend or split-up "in reverse," leaves each holder in exactly the same relative position as before. The process is merely a recognition, and not the cause, of the injury. The damage may have been done long ago. But the act of decapitalization is as much a cause of wringing of hands as stock dividends and split-ups are an occasion for jubilation.

Illustration of decapitalization. Financial annals from 1931 to 1937 are strewn with numerous and often drastic illustrations † of decapitalization, as a method of squeezing out water. The American Locomotive Company is one of the most interesting examples. The demand for locomotives became almost nil in 1932 and 1933, and the company operated for several years at a loss. The value of many of its fixed assets deteriorated. It maintained a rather liberal dividend policy, however, paying dividends even when not earned. The company soon realized that severe readjustments in the capital structure were necessary.

The company accordingly decided in 1932 to reduce the stated value of its no-par common stock from $50 to $5 per share. This act resulted in cutting the common stock account from $38,395,000 to $3,839,500, thus adding $34,555,500 to the capital surplus. The next accounting step was to reduce the value of the property account on the corporate books from $83,832,171 to $47,901,505 and to write down some of the investments. The net effect of these readjustments was to reduce the stated value of each share, with the same number of shares outstanding, namely 767,900, and to reduce the book value per share of common stock. The lowering of the plant value was also accompanied by a cut in the size of the total depreciation reserve from $22,164,410 in 1932 to $12,346,708 in 1933. The annual charge to depreciation expense was also greatly reduced. This latter step helped to cut expenses and was partly instrumental in improving

one quarter of $120 or $30. Actually the price shortly rose to above $40. Westinghouse Electric Corporation common behaved more according to rule. A month before the declaration of its 4 for 1 split-up the price of its stock was $132. The price afterward was $35. For statistics on some of the split-ups during this period, see *Business Week,* Feb. 9, 1946, pp. 34-35, and *Magazine of Wall Street,* December 8, 1945, pp. 262-64, and June 8, 1946, pp. 276-77, 299.

* See footnote on page 113, Chapter 7, for a summary of the various common forms such decapitalization may take.

† See Appendix G for illustrations of capital stock changes.

the net income position of the company. Later, in 1943, the company put into effect another adjustment, approved by the stockholders, which was intended to wipe out the preferred dividends in arrears. This cleared the way for the resumption of dividends on the common stock. Other changes in the capital structure were planned in 1946.

Conclusion. The corporation which we have been discussing is overcapitalized, but it still apparently has the ability to pay the current debts. The bonds also seem to be covered by a fair margin of value. The company earns $12,000 before interest, which is sufficient to cover the interest charges of $2500 by about 4.8 times. The company is still able to meet its legal obligations.

There have been numerous instances, however, in which corporations have been unable to pay the interest on their outstanding bonds, to say nothing about taking care of their current debts and bonds when due. Corporations in such condition may require more rigorous treatment, probably even reorganization.

Summary. If we add up the par value of the bonds and stocks of a corporation (using the stated value in the case of no-par stock), we arrive at a concept generally referred to as the capitalization. This figure represents the total direct contribution of a long-term or permanent nature by creditors and proprietors. The rest of the direct contribution has been made by those who advanced money to the corporation on a short-time basis, represented by the current liabilities.

If, now, we determine the real value of the assets (using the capitalization process in the case of industrial companies or some outside standard such as cost in the case of public utilities) and subtract from it the current liabilities, we have a term frequently referred to as "investment." If the total par value of the stocks and bonds is smaller than the investment, the corporation is undercapitalized; if it is greater, the company is overcapitalized.

Undercapitalization arises mainly through the retention of earnings, although the issuance of securities at a premium and the sale of some of the buildings and other fixed assets or investments at a profit are also frequent causes. The condition of undercapitalization is generally a happy one, but there are disadvantages from both the internal and from the public- and labor-relations point of view. Accordingly, many corporations have taken steps to reduce undercapitalization.

The usual method of reducing such undercapitalization is the recapitalization process, which may take the form either of the stock

dividend or the stock split-up. The exact method selected will depend upon the purpose which the corporation may have in mind. An interesting theoretical and practical problem arises as to whether the receipt of a stock dividend or a split-up constitutes income to the recipient. As a general rule the courts have answered this question in the negative.

Overcapitalization, or watered stock, develops generally from falling prices of the company's product and from adverse business conditions, though fraud and dishonesty and inefficiency in the management have sometimes been present. The squeezing out of the water is a more painful and difficult process than the elimination of undercapitalization. If it cannot be accomplished by the increase of earnings and the retention of profits in the business, the only alternative is "decapitalization." This process is essentially the opposite of the stock dividend or of the split-up and is frequently called a stock dividend or stock split-up in reverse or a split-down.

PROBLEMS

1. Many corporations in times of business and financial adversity have written down the value of their fixed assets and have decapitalized in some way.

   a. What are the forms which such decapitalization may take? (See "Capital Stock Changes—United States Fidelity and Guaranty Company," Appendix G, and "Corporate Capitalization Changes, Selected Years," in Appendix G.

   b. How could such process be used by a company to increase its net income?

2. Find four current illustrations of recapitalization. Consult the sources mentioned in problem 6 of Chapters 4 and 5.

3. Under what conditions will a corporation which desires to recapitalize use the split-up? The stock dividend?

4. What types of readjustment of the capital stock are you likely to find in times of booming business? In times of depression?

5. An investment survey of the textile industry lists Cannon Mills as earning an estimated $16 per share of common stock in 1947. The price of the stock was $73. These figures are stated as not giving effect to the proposed 100 percent stock dividend. When this stock dividend was distributed, what became the earnings per share and the theoretical price?

6. Tables showing earnings per share of common stock over a number of years frequently state that the figures are adjusted for stock dividends or for stock split-ups. What does this mean? Suppose that a company is earning at the rate of $8 per share and that the market price per share is $110. The company split its shares 4 for 1 —that is, it gives 4 new shares in exchange for each 1 held before, or, we may say, a stockholder receives 3 extra shares, which, with the 1 he has, make 4. What will be the theoretical market price and earnings per share? Suppose the earnings per share ten years before were $9 and the market price at that time were $70, what would these have to be changed to in order to make them comparable with those you just computed after the split-up?

7. Mr. A paid $105 per share for 10 shares of stock. A year later there was a stock dividend of 50 percent. He sold the 5 new shares for $80 per share. What was his income?

Chapter 13

Changes of the Capital Structure—The Reorganization Process

If a company faces adverse business conditions year after year or if there have been internal difficulties or mismanagement, it may become unable to pay its debts as they fall due. It may find itself even in a condition of total bankruptcy. Such a situation may require more or less drastic measures and remedies. An analysis of the law and the processes of bankruptcy and reorganization would require a large volume in itself, and we must be content here to summarize only a few of the essentials.

The Constitution of the United States gives Congress the power to enact bankruptcy laws. We have had several of these statutes during our history, the one in operation until a few years ago being the Act of 1898. Under that Act the effect in the typical proceeding was generally the complete liquidation of the company and the business. Secured creditors could take possession of the property, if they wished, and have it sold under the specified processes of the law. Assets available for general and unsecured creditors would be brought together and distributed on a pro rata basis as far as they went.

It was early recognized, however, that many businesses should not be dismantled. Public convenience, the jobs of the workers, or even the interests of the creditors themselves frequently made it advisable that the business continue in operation. But there was no statute under which a corporation unable to pay its debts could be reorganized. Furthermore, important groups of companies, such as railroads, were not subject to bankruptcy proceedings.

The courts attempted to fill in this breach in our law by developing a system of "equity reorganization" which took place under the equitable process of mortgage foreclosure. When a company became unable to pay its debts as they fell due, some creditor would bring

suit in a federal court and request the marshaling of the assets with a view to their being distributed. If the judge felt that the complaint of the creditor was justified, and if there seemed to be a need that the business be continued, he would place the company in the hands of a receiver with instructions to manage or run it under the jurisdiction of the court. The court might also enjoin further actions by any of the security holders. In order to raise additional funds, the receiver often obtained permission of the court to issue receiver's certificates. Such receiver's certificates were, at the discretion of the court, generally given a high priority, often a lien ahead of all the other bonds.

The holders of the various groups of securities would then appoint committees to represent them. In many instances, however, these committees were virtually self-appointed. Usually an investment banker became the "reorganization manager" in general charge of the negotiations. These committees then attempted to draw up a mutually agreeable plan of reorganization, often a difficult accomplishment. They submitted this plan to the security holders, requesting the deposit of stocks and bonds with a "general reorganization committee," or with a designated banker, for exchange into new securities when the final plan was accepted. The committees naturally hoped that all, or the great majority, of the security holders in each class would consent to the plan. Though the reorganization plan might leave some securities "undisturbed," it generally provided that many classes of bonds and preferred stocks were to receive a junior claim or a reduced rate of interest or dividend. Often stockholders were required to pay an assessment in order to obtain new shares for the old.

If the plan appeared to be sufficiently widely accepted, the judge agreed to the public sale of the company property. He then set a minimum reservation or "upset price," which was high enough to enable the paying off of all the security holders. Generally the reorganization committee was the only bidder at this sale. Having "bought" the property, the reorganization committee turned it over to a new company organized to take the place of the old. Payment for the property would then be made to the assenting security holders in the form of stocks and bonds in the new company according to the term of the reorganization plan. Dissenters had to be paid off in cash. Often all that the general public noticed in this proceeding was a slight change in the name of the company. The old Chicago,

Milwaukee and St. Paul Railway, for instance, after the reorganization became the Chicago, Milwaukee, St. Paul and Pacific Railroad Company.

Such system of "equity organization" constituted the dominant method of reorganizing railroads and some other types of companies for many years. Equity reorganization, however, had several weaknesses. There were no specific statutory procedures or requirements to be followed. The process was often extremely slow, costly, and cumbersome, and sometimes it was tainted with graft and excessive fees. The court had little opportunity and often little inclination to determine whether the plan was fair to the holders of each group of securities or whether it really went to the heart of the company's financial trouble. Since dissenting holders could not be forced to agree to the new plan, provision had to be made to pay them off in cash. Such holders frequently took this opportunity to create a "nuisance value" for themselves.

Largely as a result of these and other weaknesses, Congress in the 1930's amended the bankruptcy law in several ways. By Section 77 in 1933 (subsequently amended), Congress set up a statutory procedure for reorganizing railroads. In 1934 came Section 77B laying down certain requirements for the reorganization of "other corporations," which, under our laws, means corporations other than railroads, insurance companies, and banks. Then, in 1938, Congress reworked the entire bankruptcy law, the revision usually being referred to as the Chandler Act. This Act incorporated the basic principles of Section 77 and included many of the provisions of Section 77B. This latter Section, with amendments, formed the nucleus of Chapter X of the new Act. For all practical purposes, Chapter X applies to corporations other than railroads, insurance companies, and banks. We shall often refer to it as applying generally to nonrailroad and nonfinancial institutions.

Purposes of reorganization. Reorganization is essentially a process of financial surgery. Its basic purposes may be divided into two broad groups:

1. The basic or primary purposes
    a. To reduce fixed charges,
    b. To reduce the total capitalization.
2. The incidental or secondary purposes
    a. To simplify the capital structure,

b. To eliminate restrictive and burdensome provisions in security contracts,
c. To wipe out certain troublesome current obligations,
d. To raise additional capital,
e. To increase the efficiency of the corporation management.

Of the basic purposes, the desire to reduce fixed charges is always present. That is, indeed, the essential idea in all reorganizations. Though in early reorganizations little attention was given to the reduction of total capitalization, this has under recent legislation, as we shall see, really become a fundamental purpose of the reorganization process.

The incidental or secondary purposes generally partake more or less of the nature of opportunism, though in some reorganizations they occupy an important position. Those in charge of the reorganization process often reason that, though the chief aim is financial surgery, that is, the reduction of fixed charges or the decrease of the total capitalization, they might as well incidentally make needed or desirable changes in the security contracts and in the capital structure. Sometimes extremely troublesome current debts and obligations, such as certain leases, can be eliminated. If the operating efficiency of the company can at the same time be improved, or if some additional funds can be raised, these are all to the good.

An illustration. Smith and Company, Incorporated, an industrial company, has assets listed with a total value of $61,000,000. On the liabilities side are found the following items:

First-mortgage 5 percent bonds, callable, closed-end, with after-acquired property clause, due 1950	$ 8,000,000
Second-mortgage 5 percent bonds, noncallable, closed-end, due 1960	7,000,000
Debenture 6 percent bonds, callable, due 1975	5,000,000
Accrued wages	400,000
Accounts payable	2,000,000
Notes payable	4,000,000
Accrued taxes	100,000
Preferred stock, 6 percent, cumulative, participating, noncallable, 80,000 shares, par $100	8,000,000
Common stock, 400,000 no-par shares, stated value $40	16,000,000
Proprietary reserves	3,000,000
Surplus	7,500,000
	$61,000,000

SUMMARY OF OPERATING AND INCOME STATISTICS

Net sales (sales after discounts and returns)	$12,000,000
Costs and expenses, including depreciation and all taxes	11,300,000
Net profits before payments to security holders	700,000
Interest on first-mortgage bonds	400,000
Balance	300,000
Interest on second-mortgage bonds	350,000
Balance (*deficit*)	50,000
Interest on debenture bonds	300,000
Available for preferred stock dividends (*deficit*)	350,000
Available for common stock	(*deficit*)

Procedure in reorganization. The results of operations for the past few years have been uncertain and unsatisfactory. The company is now unable to pay its current liabilities or all its interest, to say nothing of dividends. The fact that the first-mortgage bonds are due in 1950 is staring it in the face. The corporation, or the indenture trustee, or three or more creditors having claims totaling at least $5000 may under our federal laws * file a petition in a bankruptcy court alleging that the company is financially insolvent or unable to pay its debts as they mature, such as interest or notes payable. If the creditors or indenture trustee brings the suit, which would then be called an "involuntary proceeding," they must also allege that the "debtor" has committed an act of bankruptcy within four months prior to the filing of the petition † or that certain other conditions indicating financial involvement or bankruptcy are present.

If the judge is satisfied that these allegations are true, he appoints a trustee to take over temporary control of the property. The duties of the trustee include drawing up of a plan of reorganization for the company. If the liabilities of the company are less than $250,000, the court may, however, permit the debtor corporation to continue in the control of the property. In this case the reorganization plan may be submitted by the debtor company, or by groups of creditors, or by the indenture trustee. Under certain conditions if, for in-

* Chapter X of Chandler Act of 1938—Public No. 696—75th Congress.

† By an act of bankruptcy is meant such acts by the "debtor" as concealing property or transferring it to an outside party with an intent to defraud the creditors, or, while insolvent, giving to one class or group of creditors, some advantage over other creditors by turning over to them a prior control over certain properties, or making a general assignment for the benefit of the creditors, or, while financially insolvent, permitting the appointment of a receiver or trustee to take charge of its property, or admitting in writing its inability to pay the debts and its willingness to be adjudged bankrupt.

stance, the difficulty is in the lack of liquidity or of immediate availability of the assets rather than in their total reasonable value, the stockholders may submit a plan of reorganization. In such event the assets may really be worth more than the face amount of the debts, and the stockholders may thus have a substantial interest in the corporation.

Requisites of reorganization plan. The law covering nonrailroad and nonbanking corporations, as embodied in Chapter X of the Chandler Act of 1938, stipulates that the reorganization plan must be fair and equitable and feasible. Subject to appeal to the higher courts, the bankruptcy judge has the sole decision as to whether the plan meets these tests laid down by Congress. If the scheduled liabilities of the debtor company exceed $3,000,000, the judge must submit any worthy plan to the Securities and Exchange Commission for its examination and report as to whether it is fair and equitable and feasible. If the indebtedness does not exceed that sum, the judges are not required to submit the plan to the Commission, but they very frequently have done so. The Commission generally has kept itself constantly informed in all cases in which the securities in the hands of the public have aggregated at least $250,000. The report by the Commission is advisory only, but the courts have generally given sympathetic consideration to its findings and opinions.

After a plan of reorganization has been approved by the court, it is submitted to the stockholders and creditors for their acceptance or rejection. The opinions of the court and of the Securities and Exchange Commission are also sent to the security holders to aid them in their decision. If two thirds of each class of debt securities and a majority of each class of stock (if the company is not totally insolvent) * approve the plan, the judge holds a final hear-

* The word "insolvency" has several usages. The act states that a person is insolvent whenever the aggregate of his property, exclusive of any amount which he may have conveyed or removed with intent to defraud or obstruct the creditors, shall not at a fair valuation be sufficient to pay his debts. If the company is insolvent in this sense (often called total insolvency or insolvency in the bankruptcy sense), there is nothing available for the stockholders, and they should, therefore, have no vote on the plan.

In another use, "insolvency" has a financial or, we might say, temporary, meaning. In this sense the company may have enough assets to cover all the debts but is unable to pay the debts as they mature. In this kind of insolvency the stockholders may have something to say as to the nature of the plan and may vote on its provisions, since there is presumably something left for them.

The original petition as filed by the creditors or indenture trustee or by the corporation itself must state *that the corporation is insolvent or unable to pay*

ing, and, if all the statutory requirements are satisfied, he declares the plan in effect and binding upon all security holders.

As already stated, Chapter X of the Bankruptcy Law of 1938 (Chandler Act) lays down the general principles that a reorganization plan for a nonrailroad and nonbanking corporation must be fair and equitable and feasible. To be fair and equitable, a plan must do justice to all the parties concerned. What does justice mean? The chief test comes in the answer to this question: Does the plan follow the absolute priority rule? According to this rule, prior claimants must be paid in full, either in cash or in new securities or in other forms of property or valuable privileges, before anything can be given to subsequent holders.

In interpreting the requirement of feasibility, the Securities and Exchange Commission "is particularly concerned with the adequacy of working capital, the relationship of funded debt and capital structure to property values, the adequacy of corporate earning power in relation to interest and dividend requirements, and the effect of the new capitalization upon the company's prospective credit." * In short, the reorganization plan must be economically sound and practicable and must have a reasonable chance of working. It must not be an "incubator for future reorganizations."

The fundamental factor to be considered in the enforcement of both the fair and equitable rule and the requirement of feasibility is the value of the plant and business of the debtor corporation. An evaluation as a going concern is needed to find whether anything is left for certain groups of securities. It is also necessary to determine whether there is a reasonable relation between the proposed capitalization and the ability of the corporation to support it.

Formulation of a plan. Let us now consider the working out of these principles.

The net income of Smith, Incorporated, before interest and after costs, expenses, and taxes of all kinds is $700,000. It has fluctuated around that point for several years. Using an interest rate of 6 percent, we arrive at a value of the business, including the plant and net working capital, of $11,666,667. A survey outlining definite possible improvements in operations and marketing shows, how-

its debts as they mature. In other words, the corporation need not be totally insolvent, or insolvent in the bankruptcy sense, in order to be made the subject of the reorganization process.

* *Tenth Annual Report* of the Securities and Exchange Commission for fiscal year ended June 30, 1944, p. 151.

ever, that the company has a good chance of earning an average net of $900,000. At 6 percent, the going value of the business would then be $15,000,000. This figure should represent the maximum capitalization of the reorganized company. Feasibility would seem to demand, however, that the desirable capitalization be somewhat lower than this limit. All this means that the total of $44,000,000 of securities outstanding will have to be drastically reduced. But which securities are to be cut and how much?

Let us consider each group of securities. The first mortgage 5s, due in 1950, are in a fairly strong position, but they do have some points of weakness. Their interest was earned only one and three quarters times and their par value is more than one half of the probable value of the entire business. The absolute priority rule requires that these holders be given first claim, but it does not necessarily mean that they must be given the same par value of new first mortgage bonds. The rule merely states that, since the first mortgage 5s came first among the security holders in the old company, they must stand first in the new company to the full par value of their claims, if the assets are adequate. These holders will naturally argue until the last breath that they should get new 5-percent first mortgage bonds for the entire amount of their old securities.

The requirement of feasibility, however, must also be met. Interest at 5 percent on new mortgage bonds of $8,000,000 would be covered only two and one quarter times by the anticipated earnings of $900,000. A sound mortgage of an industrial company should have an interest coverage of at least four or five times in a normal year.

Increased coverage for these bonds may be obtained in two general ways: (1) by reducing the coupon rate from 5 to, say, 3.5 percent; (2) by decreasing the total par value. A combination of these two also is possible. A substantial reduction of the par value with a small decrease in the coupon seems to represent the best choice, since it would permit the maintenance of the coupon rate at a reasonably high point and would at the same time bring about a more conservative ratio of assets to first-mortgage bonds.

But, you will ask, is it legally permissible to decrease the total par of the first-mortgage bonds? Since the assets are more than enough to cover the par value of these bonds, must not the holders be given a prior claim for the entire amount due them? In answer

to these questions, we emphasize the fact that the absolute priority rule does not require the handing out of the same *kind* of security, just so no inferior claimant is allowed to take a place ahead of, or alongside, the securities received by the holders of the prior-claim bonds. The requirement of the law would be met, for instance, if the reorganization plan provided for the issuance to the holders of the first mortgage bonds $4,000,000 of new 4.5-percent first-mortgage bonds and $4,000,000 of income or adjustment bonds carrying a 5-percent rate, provided none of these new bonds were given to any junior holder or claimant. Such arrangement would give the holders of the $8,000,000 old first-mortgage bonds the same par value as they had before, and they would still be in first place, ahead of all other security holders. The interest on income bonds, often also called contingent interest bonds, would have to be paid only if earned.*

The required interest on the $4,000,000 of new first-mortgage 4.5-percent bonds would be $180,000. If the future net income before payments to any security holders but after taxes is estimated at $900,000, these interest charges will be earned five times, which is a fairly reasonable coverage. Both the new first-mortgage bonds and the income bonds should be made callable. The closed-end and after-acquired property clauses in the first-mortgage bonds should be eliminated. In accordance with best practice, the income bonds could be made cumulative after five years. The cumulative feature on income bonds is analogous to that provision for preferred stocks.† Since the due date on the old first-mortgage bonds is only a couple of years away, the reorganization plan should advance the maturity date to, say, 1968. The income bonds could be made to

* If there were accrued and unpaid interest on the bonds, such amount would have to be added to the principal for purposes of formulating our plan. For instance, if interest on the first mortgage had been unpaid to the extent of $400,000, the claim of the first-mortgage bonds would have been $8,400,000.

† Instead of the plan just outlined many other schemes would be possible. The new company could issue $8,000,000 of new first-mortgage bonds with, say, half the interest absolutely promised, and the other half contingent on earnings. Or the plan might provide for preferred stock, instead of income bonds, for the balance of $4,000,000. Or if the prospect of the company seemed unusually bright, it might be feasible to issue the balance of the $4,000,000 also in the form of first-mortgage bonds. In such case the interest on the $8,000,000 should be reduced to 4 percent in order to furnish a better coverage of interest charges. Numerous other possibilities will occur to the reader. Care must always be taken to follow the absolute priority rule.

fall due rather far in the future, say 1978. Their principal could well be secured by a mortgage.

What shall be done with the remaining securities? The answer to this question for each class of security also depends upon the prospective earnings and value of the plant and upon the position of the others. If the plant of the reorganized company has a capitalized value of $15,000,000, including a fair working capital, the total securities should not exceed that sum; feasibility would demand that they be less. Since there are $20,000,000 of mortgage and debenture bonds outstanding, these will absorb all the value and more, if it were available. Obviously, neither the preferred nor the common stock has a valuable equity in the company. Both of these should be canceled, or as it is often put, they should not be allowed to participate in the plan of reorganization. Since the total of the first- and second-mortgage bonds was $15,000,000, and since the probable value of the entire business plant is only $15,000,000, there is apparently nothing left even for the debenture bonds.

The interest on the debentures, it should also be recalled, was not even partly earned. In order to prevent the total capitalization from exceeding the value of the new company, the formulators of the reorganization plan will probably lean toward the complete elimination of any claims by the debenture holders. The unsecured accounts and notes payable will suffer the same fate. This means, therefore, that the portion of the capitalization represented by the second-mortgage bonds will take up the remainder of the feasible capitalization. Under the absolute priority rule, the second-mortgage bondholders must not be given any securities ranking ahead of, or even equal with, any securities allotted to the first-mortgage bonds. On the other hand, also, they do have the right to stay in a position immediately following the securities given to the holders of the old first-mortgage bonds. They also have the right to demand that no subsequent claims come in to share equally with them.

Several forms of treatment, accordingly, may be given to the second-mortgage bonds. The holders may be allotted the entire issue of common stock in the reorganized company. In this event they would not have to be given their entire $7,000,000 in common stock. Feasibility might not favor the issuing of securities of a par value equal to the entire value of the corporate business. If only $5,000,000 were given for the second-mortgage claims, a surplus could be created. The right of the old second-mortgage holders, as

later stockholders, to the residue of the earnings would make up for the loss in par value and in priority. Another possibility would be to give the second-mortgage bondholders $2,000,000 in 6-percent cumulative and callable preferred stock and the balance of their claim, as far as it will go, in the form of $3,000,000 common stock, say 30,000 shares of a par value of $100 per share. The latter plan, which would probably meet the requirements of feasibility, as well as that of fairness, might have a better chance of being accepted by the required percentage of the old second-mortgage bonds. It is the one used in our calculations.

Achievements of the plan. When this plan has been put into effect, the liability side of the balance sheet of the new corporation will appear as follows: *

Liabilities	
First-mortgage bonds, 4.5 percent, callable, open-end, due in 1968	$4,000,000
Income-mortgage bonds, 5 percent, cumulative and callable, due in 1978	4,000,000
Preferred stock, 6 percent, cumulative and callable	2,000,000
Common stock—30,000 shares, par $100	3,000,000
Surplus	2,000,000

The interest and preferred dividend coverages and the earnings per share of stock will be as follows, if the company earns the anticipated $900,000:

Available income	$900,000	
Interest on first-mortgage bonds	180,000	(covered 5 times)
Balance available for income-mortgage bonds	720,000	
Interest on income-mortgage bonds	200,000	(covered 3.6 times)
Available for preferred stock	520,000	
Preferred dividends	120,000	(covered 4.3 times)
Available for common stock	400,000	
Earnings per share of common stock	13.33	

* A problem always arising in reorganization is the treatment of the current liabilities. Some of them in our illustration, particularly the notes and accounts payable, being unsecured and therefore junior to the mortgage, would be wiped out. Others, such as taxes and wages, provided they are sufficiently current, might come ahead of the mortgages and would have to be paid in full. The $15,000,000 valuation which we arrived at for the company was for the value of the permanent long-time investment as a going concern. The recognized current obligations would be paid out of the current assets, or if these are not sufficiently liquid, additional cash would have to be raised. The proprietary or surplus reserves would be eliminated.

The over-all coverages are:

Available income	$900,000	
Total interest on first-mortgage bonds and income-mortgage bonds	380,000	(covered 2.4 times)
Total interest and preferred dividends	500,000	(covered 1.8 times)

This plan, if accepted, will accomplish several of the purposes of the reorganization procedure:

1. It will reduce fixed charges from $1,050,000 to $180,000. If we include the interest on the income bonds, the charges will be $380,000.

2. It will reduce the total capitalization from $44,000,000 to $13,000,000.

3. It will simplify the capital structure. There will now be only four kinds of securities, compared with five before.

4. It will eliminate the current notes and accounts payable and perhaps some of the accrued wages and taxes.

5. It will eliminate or modify some of the restrictive and burdensome provisions in the security contracts. The after-acquired clause is omitted, the bonds and preferred stock are open-end and callable.

6. It will extend the maturity dates of the long-term obligations. The company may eventually call the first-mortgage bonds and perhaps even the income bonds and preferred stock, thus further simplifying the capital structure or opening the way for future financing. The capital structure is rather overweighted with bonds, but the calling of some of the first-mortgage bonds, if the condition of the earnings and of the assets ever justifies such step, will also help ultimately to bring about a more logical relation between the amount of the equity and nonequity securities.* The reorganization process may also have focused attention on possible improvements in the operating efficiency of the new company.†

* The fact that the capital structure is top-heavy with bonds is a serious criticism of the plan. One way this could be remedied would be to change the plan so as to give the old first-mortgage bondholders comparatively few bonds and the rest of their claim in preferred stock and to give the old second-mortgage bondholders the common stock of the company. It must be noted, however, that holders of fixed-interest securities are often reluctant to have them scaled down. Since an affirmative vote of two thirds of the debt securities must be obtained, it may be very difficult to accomplish an ideal or fully feasible capital structure.

† The Securities and Exchange Commission, in its reports on the fairness and equitableness and feasibility of reorganization plans, has sometimes made recommendations as to methods by which the new company can bring about economies in its operation. Sometimes it uses pressure to bring these about.

Protests and arguments. This reorganization plan is extremely drastic. In the course of hearings, counterplans, and negotiations, substantial changes will be suggested and adopted. Many of the arguments against the plan will revolve around the favorable treatment given the first-mortgage bonds and the harsh treatment given the debenture bonds and the preferred and common stock, as well as most of the current liabilities. Moreover, the debenture bonds and the two forms of stock are given the same treatment—cancellation—though they have varying degrees of priority. The holders of these securities will argue that they acted in good faith in the purchase of their securities. Why should they have their investment completely wiped out? Furthermore, they feel that the valuation of $15,000,000 given to the company is too low in the light of the past record and the probable future performance. Why not give the company and the security holders a chance? Times are certain to improve. If the valuation were raised, some of the excluded securities could be given a certain degree of participation.

The advocates of the plan admit that it is drastic, but they counter with the following arguments:

1. The valuation, it is true, is low, but the prospective earnings are only $900,000. The rate of 6 percent used in the capitalization process is none too conservative,* and follows fairly closely the general practice in the reorganization of companies with reasonably favorable future prospects.

2. A reorganization plan cannot create values where none exist. It must look to the future, not to the past. The damage has already been done. If the business is worth only $15,000,000 and the first mortgage takes its full $8,000,000, the remainder is only $7,000,000. All of this must be allotted in one way or other to the holders of the second-mortgage bonds. To give the debenture owners and stockholders a share in the new company would deprive the prior holders

* The use of an interest rate of 8 percent means a multiplier of 12.5 times net income. An interest rate of 5 percent means a multiplier of 20. The low interest rate gives a larger valuation than does a high interest rate. Therefore, we speak of a low interest rate, such as 5 percent, as "liberal," while a high interest rate is "conservative." The Securities and Exchange Commission has allowed rates of 5 to 7 percent for companies whose earnings appear to be rather steady and certain for the future, but for companies with a bad record and dubious prospects it has often required 12 percent or above. See footnote, page 218, Chapter 12. The federal courts are even more liberal than the Securities and Exchange Commission and in several cases have raised the valuation recommended by the Securities and Exchange Commission.

of a part of their claims. Such diversion is prohibited by the absolute priority rule.

3. An increase in the valuation and a corresponding recognition of the securities below the second-mortgage bonds might violate the principle of feasibility. According to this requirement of the law as interpreted by the courts and by the Securities and Exchange Commission, the capital structure of a reorganized company must have a reasonable chance of working. Interest charges should be adequately covered, the par of the bonds should be reasonable in relation to the value of the plant. In short, the plan should be sound. The new corporation should not begin life under a shadow.

4. As to the charges that the debentures and the two classes of stock are given the same treatment—exclusion—the answer is that, if two groups deserve zero, they cannot be given different shades of zero. The passenger who barely misses a train and the one who is an hour late must be placed in the same group—neither one rides the train.

While the weight of the arguments seem to favor the plan, there is a strong probability that it would be revised in the direction of liberality. Certainly the debenture holders and probably even the preferred stockholders will not give up without a struggle. The course of drawing up and negotiating a plan of reorganization has many elements of horse trading.

Fundamentally, any liberalization of the plan must be effected through an increase in the estimate of anticipated earnings or a reduction of the interest rate used in the capitalization process. Under the legislation now in effect the chief attention has tended to focus on these two points. The requirements of absolute priority and feasibility, particularly absolute priority, has tended to emphasize this problem of valuation. If the estimated value of the assets is not high enough to permit the recognition of a certain class of security, the only practical and legal way this group can get consideration is by an increase in the value of the assets.* This can be done only

* Before World War II a large number of railroads were in the process of reorganization. Though a different law governs these reorganizations, the plans must be fair and equitable and by implication they must also be workable. In several such reorganizations, the stock was completely wiped out—that is, the stockholders were not permitted to participate, because the assets were not considered of sufficient value to justify any allocation to the old common or even preferred stock. The war increased railroad earnings, and one result was a demand by excluded groups for participation in the reorganization plans. The Securities and Exchange Commission also has encountered numerous obstacles

by raising the estimate of future earnings or by lowering the rate of interest—that is, by increasing the multiplier.

Raising of new money. So far our plan has made no provision for the raising of new capital. The suggestion might be made that the holders of the debenture bonds and of the old preferred and common stock be given the opportunity to buy new stock at a special price. In that way they could be induced to furnish capital to the new company and at the same time save some of the pieces. The courts and the Securities and Exchange Commission insist, however, that under the requirement of fairness and equitability, such special privilege cannot be given to holders of securities which clearly have no equity in the new corporation.

In our reorganization plan there is, according to the valuation, nothing left for the holders of the stock. In fact the old second-mortgage bondholders get the new stock. If, now, we give to the holders of the old worthless common stock, for instance, the privilege of buying new stock at a special favored price, the exercise of this right will thin out the book value of the other new common shares. These other shares are, according to the plan, to be held by the old second-mortgage bondholders. Such action will, therefore, take something away from these favored second-mortgage holders, who have a valuable equity in the assets, and will give it to the old common stockholders, whose stock had no value whatsoever. Such action, accordingly, would violate the absolute priority rule, which must be heeded in order to make the plan fair and equitable.

If there were a real doubt as to whether the old preferred and common stock or the debenture bonds had a valuable equity in the company, or if there were even a faint showing of value behind these securities, the rights might be issued. But in our illustration, it is doubtful if either the old preferred or common stockholders can produce a shred of evidence in their favor. The holders of the debenture bonds may put up a more plausible claim, arguing that the valuation is too low and that they are very close to the line Such rights might be issued to them in limited quantities.

To retain a position in the new company the old stockholders

"because the parties are disposed to base values and capital structures upon inflated war earnings, either because they overlook the extent to which earnings are inflated or hope such earnings will continue long enough to permit debt to be scaled down to manageable proportions." *Tenth Annual Report* of Securities and Exchange Commission for fiscal year ended June 30, 1944, p. 151.

would have to purchase new shares and pay full value for them in real "balance sheet assets." They cannot be given something for nothing. Since the new company will be in a fair financial condition, it might be able to sell new stock to the former holders or to outsiders at a full value. Furthermore, investors may be willing to purchase new mortgage bonds, though, in view of the already somewhat top-heavy capital structure, the issuance of additional fixed-interest securities would certainly not be advisable. The issuance of further income bonds as a way of raising new capital is virtually out of the question. First of all, it is doubtful if these could be sold at a reasonable rate to the company. Secondly, the federal income tax laws allow corporations a deduction for the interest paid on such bonds only if they have been issued as a part of a reorganization. Therefore, the only remaining way to raise new permanent funds would be by the sale of additional stock on the market.

Summary. Reorganization is the most drastic of the changes of the capital structure. Though there are other purposes, its fundamental objective is the reduction of fixed charges. Under Article X of the Bankruptcy Law as Amended in 1938 (Chandler Act), a reorganization plan for nonrailroad and nonbanking and noninsurance organizations covered by the Act must be fair and equitable and feasible. Subject to appeal to the higher courts, the bankruptcy judge has the sole decision as to whether a plan meets these tests as laid down by Congress. In certain cases the Securities and Exchange Commission makes a report as to whether a plan meets the legal requirements. Though these opinions are intended only as advisory, they are generally considered sympathetically by the courts.

In interpreting the terms "fair and equitable" the courts have adopted the absolute priority rule. According to this principle, a prior claim must be satisfied in full, either by means of assets or by the exchange for new securities (which need not have the same claim), before any subsequent security holders may legally share in the assets. The rule as to feasibility is mainly concerned with the questions of whether the plan will leave the company with adequate working capital and of whether the capital structure and earnings will be such as to give it a reasonable chance to pay interest and dividends and to maintain its credit standing.

These requirements all involve the placing of great emphasis on the value of the assets of the reorganized company—that is, on its

value as a going concern. In the evaluation of the company as a business, the courts and the Securities and Exchange Commission have generally capitalized the reasonable and probable earning capacity at a selected rate of interest, the exact rate so chosen depending upon numerous circumstances. In the litigation on these matters security holders who thought they were not treated fairly have made appeals usually on the ground that the estimated earnings were too small or that the rate of interest used in the capitalization process was too high. Any plan adopted must be accepted by certain required majorities of the security holders.

In this discussion we have emphasized Chapter X of the Chandler Act. Special statutes, in some cases state, in others federal, govern banks and insurance companies. Section 77, incorporated with amendments into the Chandler Act and subsequently itself further amended, applies to railroads engaged in interstate commerce. Though there are certain procedural differences, Chapter X and Section 77 are esssentially alike in their basic purpose of attempting to remedy the weakness of the equity reorganization and of opening the way for reorganization according to certain statutory requirements. While Chapter X requires that a plan to be approved must be fair and equitable and feasible, Section 77 stipulates that it be fair and equitable and compatible with the public interest. According to the provisions of this section and their interpretation by the courts, the plan must be such that there will be adequate coverage for the proposed securities and it must permit the railroad to carry on future financing. For all practical purposes, these amount to a requirement of feasibility.

The Interstate Commerce Commission makes the original analysis and decision as to whether the proposed plan for a railroad is fair and equitable and compatible with the public interest. Its report is then passed upon by the courts and is voted upon by the eligible security holders. If a stipulated percentage of the eligible groups favor the plan, the court may put it into effect. In certain cases, also, the court may order the consummation of the plan without such approval by the security holders. As a general rule, the courts have relied upon the recommendation of the respective Commission, though there have been instances in which they have refused to follow the advisory opinion of the Securities and Exchange Commission or, in the case of railroads, have sent the plan back to the Interstate Commerce Commission for further consideration or revision.

The reorganization of the Philadelphia and Western Railway Company, under Chapter X of the Chandler Act of 1938.* In Appendix H will be found an account of the reorganization of the Monon Railway under Section 77. To illustrate some of the principles of this chapter immediately we are here giving a summary of the reorganization plan of the Philadelphia and Western Railway under Chapter X of the Chandler Act.

The Philadelphia and Western Railway Company, operating electrified passenger service in suburban Philadelphia, got into financial difficulties, like many other companies in this field. Its operating revenues had declined steadily from a peak in 1925 until 1929 and very sharply in the early 1930's, leveling off in the period 1936 to 1940. Though the operating costs also decreased, they did not fall proportionally with the revenues. Thus, there was an almost uninterrupted decline in the net earnings of the company. The company became unable to pay the interest on its bonds. In 1934, the year in which the company filed its petition for reorganization, the net income before interest was $73,910. It had outstanding at the time $2,630,000 of first-mortgage 5-percent bonds, the interest on which was $131,500. For the five-year period 1930 to 1934 the company earned its bond interest on the average barely once. For the five-year period 1935 to 1939, the net income (excluding certain adjustments) before interest, but after taxes, averaged only $45,000, or about one third of the interest charges.

Several plans of reorganization were drawn up throughout the years. The first, in 1935, was not approved because under it virtually the same capital structure would have remained in effect. The second, in 1939, was disapproved by the Pennsylvania Public Utility Commission (which, being the state regulatory body, had, under Chapter X, an advisory position in the case) because it was based on too optimistic an estimate of the prospective earnings.

A third plan, approved by the Pennsylvania Public Utility Commission, was referred by Federal Judge William H. Kirkpatrick of the Eastern District of Pennsylvania in 1943 to the Securities and Exchange Commission for an advisory opinion pursuant to Chapter X of the Federal Bankruptcy Act. (The debtor company was not an interstate railroad. If such had been the case, the Interstate Commerce Commission would have had jurisdiction in the proceedings.)

* Data from Securities and Exchange Commission *Decisions and Reports*, Vol. 13, pp. 330-39 (1943) and various news reports.

The important provisions of the plan were as follows:

1. The outstanding $2,627,000 of 5-percent first-mortgage gold bonds were to be canceled, the bondholders to receive $400 of principal amount of new first-mortgage income bonds and 4 shares of common stock in return for each old $1000 bond. (The first-mortgage bond outstanding had been reduced by $3000 from the $2,630,000 outstanding in 1934.)

2. The preferred stock and common stock were to be cut off entirely—that is, they were not to be allowed to participate in the plan.

3. Certain unsecured claims for $65,000 held by the Lehigh Valley Transit Company, occupying a key position in relation to the debtor company, would be allowed a total of $6500 par value of the new income bonds and 65 shares of new common stock. This claim for $65,000 represented the result of a compromise of several issues between the companies.

The amount of old securities and claims and the proposed distribution of new securities under the plan are summarized as follows, most of the information being taken from the report of the Securities and Exchange Commission:

Existing securities and claims		Proposed distribution	
		New first-mortgages income bonds (5%)	New common stock (shares)
First-mortgage 5s of 1960	$2,627,000 *	1,050,800	10,508
Unsecured claims	65,000 †	6,500	65
Preferred stock 5% (cumulative)	2,000,000 ‡	None	None
Common stock	745,000 §	None	None

* Principal amount, not including accrued interest. Since January 1, 1934, only two semiannual coupons had been paid. As of December 31, 1943, the total unpaid interest on these bonds aggregated $985,125.

† Claims of Lehigh Valley Transit Company in the amount allowed by the court.

‡ This is the par amount, excluding arrears. No dividends on the preferred stock had been declared or paid since October 15, 1930.

§ There were 74,500 common shares of a par value of $10.

The two questions confronting the Securities and Exchange Commission in making its advisory report were:

1. Is the plan fair and equitable?
2. Is the plan feasible?

1. *Is the plan fair and equitable?* In regard to this question the Commission discussed two essential points:

a. What is the value of the company on the basis of the reasonably expected earnings?

b. Does the plan contemplate a fair distribution of the new securities?

The new earnings had risen during the early war years to more than $226,000 in 1942, but the Securities and Exchange Commission concluded that these would probably not be permanent in view of the bad long-run prospects of the electric railway industry generally. The reasonably expected earnings were estimated by the Commission at some $65,000. The capitalization of these at 9 percent would give a total value of approximately $720,000. To get a value equaling even the amount of the mortgage bonds of $2,627,000, plus the $985,125 unpaid interest on these bonds, and the unsecured claims, or a total indebtedness of $3,677,125, would require a rate of capitalization of about 1.8 percent, certainly an unreasonably low interest rate. Even if the war earnings of about $200,000 were capitalized at 9 percent, a valuation of only $2,222,000 would be obtained, which also is considerably less than the total of the mortgage bonds plus the unpaid interest. On the basis of figures such as these, the Commission concluded that the property, on the basis of earnings, was worth far less than the oustanding debts and interest claims. In other words, the company was totally insolvent or insolvent in the bankruptcy sense, by which we mean a condition in which a debtor has property inadequate in value to cover its debts. Thus, there is nothing available for the stockholders. To get even a small amount for the preferred stock would require capitalizing the war earning capacity of $200,000 at 5 percent. The $200,000 is too high to be a level of net income reasonably expected in the future, and even if these earnings were possible or probable the 5-percent rate is too low. Consequently, concluded the Commission, the fact that the plan excluded both the preferred and the common stockholders from participation in the plan did not violate the requirements of fairness and equitableness.

The absolute priority rule, therefore, requires that all the value should go to the first-mortgage bondholders. Such compensation need not, of course, be in the form of first-mortgage bonds, provided the old first-mortgage bondholders receive everything. It was also compatible with the absolute priority rule to give the old bondholders new bonds for a portion of their claims and stock for the rest, as far as the value went. As far as that is concerned, we may probably conclude that it would have been legal to give the bondholders only stock, provided they got it all. It might have been difficult, however, to induce the necessary majority of the bondholders to agree on the all-stock plan.

2. *Is the plan feasible?* The Commission answered this in the negative. There were a number of features of the plan which seemed objectionable from the point of view of feasibility. We can here mention only the more fundamental ones. The Commission stated that even though the proposed $1,057,300 of bonds are income bonds, it is proper to point out that the interest at 5 percent would be covered only about 1.2 times by the anticipated earnings of $65,000. This is hardly an adequate coverage. Moreover, since the value of the entire company business is not equal to the par value of these proposed bonds, the ratio between the assets and the bonds is not favorable. The Commission also objected to the provisions of the

Assets

	Philadelphia and Western Railway Company December 31, 1943	Philadelphia and Western Railroad Company December 31, 1946
Road and equipment (net after depreciation)	$8,267,982	$5,658,735
Other physical property and investment in affiliated companies	147,104	165,236
Special cash reserves		141,202
Current assets	677,311	467,162
Other assets	68,297	19,941
	$9,160,694	$6,452,276

LIABILITIES

	December 31, 1943	December 31, 1946
Preferred stock, cumulative, 5-percent, par $50	$2,000,000	None
Common stock	745,000	2,114,600 *
First-mortgage bonds	2,627,000 †	769,847 †
Current liabilities	208,482	180,971 ‡
Unpaid bond interest	985,125	
Special reserves		121,400
Other liabilities	184,445	
Surplus	2,410,642	
Unearned surplus §		3,219,153
Earned surplus		46,305
	$9,160,694	$6,452,276

* New common stock, 10,573 shares. Of this 10,508 shares went to the old bondholders and 65 shares went to the unsecured creditor. The new stock is no par, with a stated value of $200.

† The issue of 2,627,000 carried a 5-percent rate and was due in 1960. The issue of 769,847 carried a 3½ percent rate and is due in 1967.

‡ Includes $4300 worth of unused tickets.

§ The "unearned surplus" is an unusual account presumably created because the company did not reduce the value of its plant to correspond with the value as shown by the capitalization process. The value of an investment for rate making purposes is fixed or determined by such factors as original investment or historical cost and cost of reproduction less depreciation.

sinking fund, saying that it would not build up rapidly enough. The Commission also pointed out that after the cancellation of the accrued and unpaid bond interest the company would have an excess quantity of net working capital. Perhaps part of this excess could be distributed among the bondholders.

The plan, therefore, went back to the court and to the company for further consideration. A subsequent revision was favored by the court and received the approval of the required security holders. On January 16, 1946, the Federal District Court ordered that this revised plan be put into effect. The final plan provided that the holder of a $1000 par value of first-mortgage 5-percent bonds receive $100 in cash, $300 of new first-mortgage bonds with a coupon rate of

$3\frac{1}{2}$ percent, and 4 shares of new common stock. Certain other concessions and cash payments were given to the bondholders. It will be noted that the new bonds are not income bonds, but that the coupon rate is reduced to $3\frac{1}{2}$ percent. This lower rate, combined with the fact that $300 rather than $400 in bonds was given for each old $1000 bond improved the earnings coverage on the bonds considerably. The Lehigh Valley Transit Company was given $1218 in cash and 65 shares of new common stock, this special treatment being justified by the small amount of the claim and the strategic importance of the creditor. The plan as to the sinking fund was revised to provide for larger annual payments.

The comparative balance sheet on pages 244 and 245 gives the condition of the company before and after the consummation of the plan.

PROBLEMS

1. The interest charges paid by American Class I railroads were $480,000,000 in 1936, $462,000,000 in 1939, and $344,000,000 in 1946. Most of these reductions were accomplished voluntarily in the normal course of business, but many of them came through involuntary reductions by reorganizations. In 1939 there were 77,000 miles of railroad in bankruptcy, a figure reduced to 35,000 miles at the end of 1946. During the period 1941-46, twelve Class I railroads went through reorganizations, resulting in a reduction of $756,000,000 in the total debt.

a. How does reorganization accomplish a decrease in interest charges?

b. As indicated, most of the decrease in interest charges came through voluntary methods. What are several ways in which a decrease in interest charges can be accomplished normally?

c. Did a similar kind of decrease occur in other industries? See Tables "Net Public and Corporate Debt and Private Mortgages" in Appendix F, "New Security Issues by Corporations in the United States" in Appendix F; and "Yield on Various Forms of Securities" in Appendix L.

2. Under the old system of equity reorganization, the dissenting minority creditors could often obstruct the reorganization by demanding cash for their claims. Moreover, the process was often slow, cumbersome, unorganized, and very expensive. Frequently, also, the new plan was unfair to some of the security holders or proved in-

capable of accomplishing its purpose. The primary ideas of Section 77B and of Chapter X of the Chandler Act of 1938, as well as Section 77 for railroads with subsequent amendments were to systematize and expedite the reorganization process, to assure fairness to the parties, to eliminate the right of dissenting creditors to cash, and to make reasonably certain that the plan would have a good chance to remedy the fundamental situations.

a. Explain what provisions of, say, Chapter X, were intended to accomplish these purposes.
b. What provisions were included in the laws to avoid abuse of any group of security holders?
c. How does the present reorganization legislation both in the railroad and in other fields tend to place an emphasis upon the problem of valuation?
d. Note the processes and issues involved in the Monon reorganization (under 77) in Appendix H.

3. A company in reorganization proceedings under Chapter X has outstanding 6-percent first-mortgage bonds of a par value of $1,000,000 and unpaid interest of $90,000. Its common stock has a total par value of $500,000. The reorganization plan provides that $1,090,000 of new 6-percent preferred stock be given to the holders of the old mortgage bonds and that the new company issue $300,000 par of new common stock, to be given pro rata to the old common holders. The plan is submitted to the Securities and Exchange Commission for its advisory opinion under Chapter X. The Commission finds that the average reasonably expected earnings after provision for all taxes will be $42,000. In its computations the Commission uses an interest rate of 7 percent.

a. Is this plan fair and equitable?
b. Is it feasible?

Assume, instead of the above, that the plan proposes to give $790,000 of new 6-percent preferred stock and $300,000 of new common stock to the old bondholders. The old common stockholders are to receive no new stock at all, but they are to be given an option to purchase $200,000 par of new common stock for $100,000 cash in appropriate ratios to their old holdings. Also assume in this case that the Commission found the probable going value of the company to be $1,200,000.

Is this plan fair and equitable? Is it feasible?

4. The Chicago, Rock Island and Pacific Railway reorganization plan was recently attacked in the courts on the ground that it was unfair because it was based on prewar earnings though the postwar earnings were greater than ever. It was alleged that the railroad had a consistent earning power of more than double the Interstate Commerce Commission estimate. The petitioners were the company and the holders of some of the bonds. They insisted that the plan unjustifiably eliminated $80,000,000 in creditors' claims and $129,000,000 in preferred and common stock. The United States Supreme Court refused to intervene on the basis of the law as it now stands (*The New York Times,* Oct. 21, 1947).

Why were the petitioning security holders interested in proving that the probable earnings of the company had been underestimated? Tie this up with the absolute priority rule and the problem of evaluation of the going concern.

5. Refer to the reorganization plans of the Monon (Appendix H) and of the Philadelphia and Western (this chapter).

a. How did the procedures differ?
b. Why did the Interstate Commerce Commission not have jurisdiction in the Philadelphia and Western case?
c. Why did the Pennsylvania Public Service Commission have the right of consultation in the Philadelphia and Western case?
d. How did the respective Commissions answer the question as to whether the plan was fair and equitable? What specific and peculiar questions arose as to this in each case?
e. Summarize the effects of each plan on the capital structure and the fixed charges.

Chapter 14

Financing from Internal Sources

A CORPORATION can change its capital structure by raising additional funds, and these funds can be obtained in two general ways: from internal sources; from external sources. If funds are raised from internal sources, a company may distribute less than it earns —that is, it can hold back on dividend declarations. The balance so withheld is then placed in the earned surplus account and reinvested in the business—in working capital or in permanent equipment and buildings. This is frequently referred to as the process of surplus accumulation and the reinvestment of earnings.

Arguments for surplus accumulation. The advisability of surplus accumulation has long been a subject of debate. The arguments most frequently advanced for this practice are:

1. Surplus is necessary to enable a corporation to expand.
2. Surplus is necessary to permit a corporation to maintain its independence in, or from, the money market.
3. Surplus is necessary to enable a corporation to pay steady dividends and (a more recent argument) to pay steady wages.
4. Surplus is necessary to maintain or improve the credit position of a company.*

The advocates of surplus accumulation point out that, in an economy which is dynamic with numerous technological changes, a company must be in a position to expand and take advantage of opportunities. Furthermore, they point out, investment bankers are not always in a position to supply the needed funds in adequate amounts and on advantageous terms to the company. Investment bankers have often demanded concessions, such as representation on the board of directors, which many corporations are reluctant to concede. Henry Ford's antipathy toward the money market was said to have been at least partly due to such demands.

* See Appendix I for amounts of internal financing over a period of years.

(The most frequently advanced argument for the accumulation of earnings is that the presence of a surplus enables a company to pay steady dividends. Such stable dividend policy, coupled with the very existence of an adequate surplus, it is argued, in turn helps to improve the credit position of a company and facilitates further financing at lower cost.)

The validity of these arguments depends upon circumstances. It may not be necessary for a corporation to expand its scale of operations. Many companies are already overexpanded. Though for years investment banking accommodations were frequently inadequate, expensive, and even unavailable, it is not so difficult now as it once was to obtain funds through the regular banking channels. Savings have become more abundant. Regulation by such bodies as the Securities and Exchange Commission and an increased social consciousness have done much to reduce the fees and to curtail the burdensome requirements imposed by investment bankers. Developments in the past twenty-five years have deflated the banker's ego. He is no longer considered omniscient or an unerring prophet of business and industry.

Much emphasis has been placed upon the necessity of a large surplus to assure the ability to pay steady dividends. Let us analyze this familiar argument more fully.

Cash dividends are, of course, paid out of cash or assets, rather than out of surplus. The ability to pay dividends is dependent upon the condition of the assets as well as upon the earnings and amount of available surplus. Assume the simple balance sheets shown below.

Company *A* has a huge surplus, perhaps built up out of past earnings. These earnings have been plowed back into the business largely in the form of fixed assets, such as land, buildings, and

COMPANY *A*

Assets		Liabilities	
Land and buildings	$3,000	Common stock	$1,000
Machinery	2,400	Bonds or other debts	500
Inventory	400	Surplus	4,500
Receivables	100		
Cash	100		
	$6,000		$6,000

COMPANY *B*

Assets		Liabilities	
Land and buildings	$1,000	Common stock	$3,500
Machinery	1,000	Bonds or other debts	500
Inventory	2,000	Surplus	2,000
Receivables	1,000		
Cash	1,000		
	$6,000		$6,000

machinery. Company *B* has a smaller surplus, but its assets are in a much more liquid form.

Though Company *A* has a larger surplus than Company *B*, it would probably be forced at the first darkening of the financial skies to suspend payment of dividends on its stock unless it wished to hand out a machine or the deed to a piece of land—a step which certainly would not be feasible. Company *B*, on the other hand, has such a large quantity of liquid assets that, though its surplus is smaller, it might be able to continue cash payments for a considerable period.

Current discussions of the need for guaranteed employment and an annual wage is focusing even more attention on adequate reserves and surpluses. A company that has undertaken the policy of guaranteed employment may be virtually forced to continue a high level of operation even at times when it might prefer to curtail its activity. It will, accordingly, have to build up special reserves for the purpose.* To be effective, such employment reserves, like any other surplus items, would have to be kept reasonably liquid.

Nature of surplus. The word "surplus" is so frequently abused and misunderstood that it is appropriate here to discuss again its real nature.

Let us refer to the simple balance sheet of Company *B*. This corporation owns $6000 worth of assets. It obtained $500 of these from its creditors, who were given notes or bonds evidencing such debt. It obtained $5500 directly or indirectly from the owners. Of this, $3500 is represented by the par value of the stock. The rest, or $2000, came in this case mainly from undistributed earnings. We call this surplus. Some businessmen in England call it "the rest."

* See, for instance, John M. Chapman, "Why Business Needs Adequate Reserves," *Commercial and Financial Chronicle,* June 5, 1947, Section I, p. 2.

Let us now suppose that the company sells $400 worth of its inventory on credit for $1000. The expenses, paid in cash, are $300. The company has "made" $300. Disregarding any changes in the balance sheet which may have occurred at the same time as the result of other transactions, the above sale would result in a new balance sheet. (Accountants call this a *pro forma* balance sheet.)

COMPANY *B*

Assets		Liabilities	
Land and buildings	$1,000	Common stock	$3,500
Machinery	1,000	Bonds or other debts	500
Inventory	1,600	Surplus (The $300 profit has been transferred from income to the surplus account)	2,300
Receivables	2,000		
Cash	700		
	$6,300		$6,300

It will be noted that while the company has "made" $300 and has added that sum to its surplus account, the cash has decreased by $300. Surplus, it can be seen, is not cash.

The company now collects $1000 of its receivables. This increases the cash to $1700 and reduces the receivables to $1000. The surplus has not been affected. The company now "reinvests" $500 of its surplus in a machine. The seller of the machine cannot, of course, take "surplus" in payment, for surplus is merely a bookkeeping entry. He wants some kind of asset in exchange—let us say cash. The machinery account now becomes $1500, cash is reduced to $1200. And, again, surplus is unchanged.

Now, let us assume the company pays off the debts at par. By this act cash is reduced by $500 and the debts are canceled. The elusive surplus remains as before. What then, it will be asked, does affect surplus?

Transactions affecting surplus. There are five basic groups of transactions that will affect the surplus. Let us specifically refer to those that will reduce it.

1. *The company pays out or disposes of an asset, getting nothing of value in exchange.* This is illustrated by four kinds of transactions, (*a*) a cash dividend, by which the stockholder gets the asset; (*b*) an operating loss, by which one of the factors of pro-

duction—say labor—gets the asset (in this case the workers may be said to contribute to the company less than they receive in wages); (c) a sale of a fixed asset at less than its value on the books; * (d) the theft or destruction of an asset without full insurance protection, by which act the asset goes to someone else, or is destroyed, without any corresponding receipt.

2. *The company writes down the value of an asset.* By this accounting entry the company merely recognized a loss on the books without making a sale. This loss can be said to be "unrealized."

3. *The company pays off a debt by means of an asset worth more than the face value of the obligation.* If Company *B* pays off the $500 bonds by means of $550 cash (call price 110), the $50 will be charged to (taken out of) surplus.

4. *The company transfers surplus to the capital stock.* An illustration of this is the stock dividend, which was discussed on page 213 of Chapter 13.

5. *The company creates some special reserve accounts out of surplus.* Sinking-fund reserves and reserves for contingencies serve as illustrations. Even though these may be created by a regular charge to income, the corresponding reduction of the annual income accomplishes an indirect decrease of the surplus.

Some accountants have suggested that the word "surplus" be left out of our balance sheets and that its place be taken by various reserves and special accounts so named as to indicate clearly their nature. Stockholders and managements sometimes become so complacent in their reliance upon a large surplus as to becloud the fact that, after all, the payment of cash dividends, as well as investments in plant and the cancellation of liabilities, requires a certain degree of liquidity of assets. It must be recognized, of course, that industries differ. Some companies can and should have more fixed assets than others. An efficient public utility, for instance, could never be as liquid as Company *B*, and it is improbable that even the worst managed merchandising concern could have a balance sheet like that of Company *A*.

The terms "distribute earnings," "distribute surplus," "invest

* In this case the one who originally sold the asset to the company may have received more than it was worth, the actual sale being thus merely a realization or consummation of the loss. Or the company may not have allowed sufficient depreciation on the asset in the past, thus overstating its value on the books, an overstatement which shows up when the asset is sold. This really means that the purchasers of goods from the company in the past had paid less than their full cost. In effect the customers had received part of the fixed assets for nothing.

surplus," etc., are well accepted and standard expressions. The purpose of our excursion into the nature of surplus was not to argue against the use of these terms, but merely to point out their proper usage. To say a corporation "distributes surplus" is a short-cut way of saying that it distributes cash or other assets with no corresponding receipt, the result being, therefore, a decrease in surplus. When a company invests surplus it really changes its cash or some other liquid asset into another form of property with no direct effect whatever on the surplus account. The fact that these expressions are specialized language has often led to confused thinking.

Appraisal of argument. The building up of large surpluses or reserves for the stabilization of dividends does not assure continuity of such dividends. The United States Steel Corporation for years held back earnings and "reinvested" them, at first in order to squeeze the water out of its stock, then to add some flesh to the bones, and finally, among other reasons, to help assure a stable dividend policy. In the depression of the early 1930's, however, it was forced to omit dividends on its common stock and even was temporarily in arrears on dividends on its cumulative preferred stock. Even Henry Ford, with his huge "surplus," borrowed money from his dealers.

If the assets are in the proper form or condition, the withholding of dividends and the building up of a surplus may help to make a company self-contained and independent of the money market. The constant protection of a company from the scrutiny of the market, however, has serious disadvantages. A company which is continually plowing a large part of its earnings back into the business may be doing so with its eyes closed and without proper consideration of important broad social questions. For instance, what is the value to the company of the withheld funds? Will these funds bring in a greater return to the corporation than they would to the individual stockholders? Could the stockholders themselves invest the funds to better social advantage than the corporation?

If the productivity of the withheld capital to the company is 8 percent, while the yield on the investment for other companies in that industry, or for companies in other industries, is 4 percent, the corporation may be contributing to the social welfare by investing the surplus in its plant rather than by distributing it to the stockholders. If, on the other hand, the directors expand the plant so greatly as to cause the productivity of the additional assets to shrink to, say, only 2 percent, while the outside market rate is 4 percent, the company may be making an uneconomic investment. From the

social point of view, it would appear desirable to maintain the productivity of extra capital to the corporation at a point at least equal to, or only slightly below, the level in the industry.

"Financial independence" may be an advantage to a retired man, but to an active business corporation it represents a contradiction of terms. If a management is alert and efficient, it does not need or want financial independence. By going to the money market for funds, the company subjects itself to the scrutiny of the business world. If a corporation can earn only 2 percent on the desired capital, while the market demands 4 percent, competition will make quick disposal of its request for funds. Investors will prefer to place their funds in some company or industry which can pay the current rate. The submitting of a request for funds to outsiders tends to have a wholesome influence upon both the financial and the operational management.

The building up of a huge surplus and the internal investment of the withheld funds, perhaps at a relatively low rate of return to the company, tends to deprive management of an "on-its-toes" attitude. If it need not make the current rate on its investment, why worry? The company does not have to stand inspection by that tough top sergeant of finance, the money market. And the great body of stockholders has little or nothing directly to say in regard to the distribution of dividends. By withholding dividend payments which have been earned the directors in effect compel the stockholders to save against their will, or even without their active knowledge. Economists refer to this as a form of "involuntary saving."

While the board of directors is responsible for both the financial and the operational aspects of a corporation, these functions are widely different. The selection of a general plant manager or the conducting of a sales campaign, for instance, are not the same type of problem as the declaration of dividends or the calling of a bond issue. American law generally does not recognize any distinction between the two types of duties, but a strong argument can be advanced for giving the stockholders as a body the right to disapprove or to modify the dividend actions of the directors.

Advocates of a large surplus often argue that, if new capital happens to be needed in time of stress, the distribution of most or all of the earnings may later force the company to issue bonds carrying an excessively high coupon rate or giving extraordinary privileges to the holders. The implication is that a large surplus would have made such outside borrowing unnecessary. This, in turn, is based on

the assumption that the surplus built up during the years is represented by assets which are available for financing expansions or for tiding over emergencies. If the surplus has been invested in the ordinary fixed assets of the company itself, however, a general economic upset would probably also find these badly frozen. The company might still need additional funds from outside.

On the other hand, if the assets had been kept so liquid, in the form of either cash or marketable securities, that they are readily available at a time of extreme financial stringency, the returns to the company on such liquid assets might have been abnormally low.

The argument that a large surplus enables a company to be free from banking influence and from the competition of the money market is of dubious value. The company may be free in prosperity when it might not need the freedom, but in times of stringency, when freedom may be most welcome, the surplus may not give the desired result. If the freedom does exist during an emergency, it is not due necessarily to the large surplus, but rather to the high liquidity of the assets.

We no longer look with favor upon the individual who hoards his money, trusting neither his own business nor that of others. More and more we regard surplus-accumulating corporations in the same light. A company does not as a general rule get much return on its cash and liquid investments. The profits come fundamentally from the use of the assets actually engaged in the regular business of the company. An unusually high degree of liquidity may, therefore, constitute a reflection upon the efficiency of the management.

If investment banking facilities are available, if individual savings are adequate, if the people have confidence in the future of business, if investors are security-minded, and if the corporation's assets do not become unreasonably and hopelessly "frozen," public opinion today seems to favor the general normal policy of distribution of most of the earnings of well-developed and established corporations.*

* The federal tax law of 1936 placed a special tax upon the undistributed income of corporations. The basic arguments for such a tax were two-fold: (1) The withholding of dividends provided a loophole for delaying or avoiding the individual income tax. The United States Treasury estimated that 30 to 40 percent of the profits of our corporations were reinvested, that is, not distributed, during the 1920's and early 1930's. The classic illustration is, of course, the closely held Ford Motor Company. The original capital stock of this company was $28,000, which through stock dividends was increased until it became $17,264,500, but the earned surplus in 1943 was about thirty-eight times that amount or more than $669,102,290. *Moody's Industrial Manual*, 1945, p. 2117. (2) Corporations tend to save too much—that is, they keep in

Financing through investment of valuation reserves. We have seen that internal financing may be done through the retention and reinvestment of earnings. It may also be done through the creation and investment of valuation reserves. As companies time after time add to the depreciation, obsolescence, or depletion reserves, they presumably charge a price for their product sufficient to cover these annual allowances. As occasion demands or warrants, these allowances or reserves are invested in new fixed assets, such as buildings and equipment, to take the place of those that have been depreciated or depleted or have become obsolete.

Let us refer to the following statement of profit and loss of a smelting company:

Gross income	$1,000,000
Expenses and costs of all kinds, except depreciation and obsolescence of plant and depletion of mines owned by the company	700,000
Income before depreciation, obsolescence, and depletion	$ 300,000
Depreciation, obsolescence, and depletion allowed during the period	100,000
Net income	$ 200,000
Dividends paid out	150,000
Net income transferred to surplus	$ 50,000

The investment of the retained earnings of $50,000 is the kind of internal financing which we have discussed up to this point. But what about the allowances for depreciation, obsolescence, and depletion? These valuation allowances are not "spent" in the same sense as raw

their company and industry funds which might be used to better social advantage if distributed among the stockholders. See Harold Groves, *Financing Government*, rev. ed., Henry Holt & Co., 1945, pp. 196-98. This tax was an essential part of the New Deal program for the redistribution of purchasing power.

This tax law of 1936 was later repealed. It was recognized that a weak or small corporation might, with social advantage, use its surplus funds for paying debts and building up liquid resources. (Please note that these acts do not directly affect the surplus account.) A small company may not have the advantage in raising funds on the money market that is possessed by many large corporations. The federal law, however, still retains the principle of special tax treatment of corporations which accumulate an "unreasonably" large surplus. Corporations withholding more than 30 percent of their net income have often been asked by the Commissioner of Internal Revenue to explain and justify their policy.

materials or wages or interest or taxes nor even as dividends are paid out by the company. When a company buys materials and spends money for wages, or pays out dividends or makes other cash outlays, someone else receives purchasing power; but when the company makes a charge for depreciation, obsolescence, or depletion, no one by this act receives anything. The entry is merely on the books. A plant could go on for a considerable time without allowing such bookkeeping expenses. It could not go on at all, however, without paying wages or taxes or without buying materials.

If our company had allowed no depreciation or obsolescence or depletion at all, its "net income" would have been $300,000. It could then have distributed in dividends, say, $250,000,* leaving $50,000 as retained earnings. But, instead, the company allowed $100,000 for depreciation, obsolescence, and depletion, thus making its profits $200,000 instead of $300,000. For all practical purposes, these valuation allowances and the retained earnings have similar effects—both are kept in the business or reinvested in some form. Whether the corresponding assets shall be kept as cash or as a "fund" or as inventories or as new plant and machinery is a decision for the management. The essential point is that our company has internally invested $150,000, not merely $50,000.

A large portion of investment "funds" of American business comes from such internal financing. At the hearings of the Temporary National Economic Committee, Edward R. Stettinius, then chairman of the board of the United States Steel Corporation, testified that his company during the years 1921-38 had invested about $1,222,000,000 in plant and equipment. Internal financing furnished about $1,140,000,000 of this, $938,000,000 coming from allowances for depreciation and depletion and $192,000,000 from net profits retained. A small amount came from tax refunds.

Other companies and industries made similar reports. Evidence was presented at the hearings to the effect that from 1935 to 1939 the nonfinancial business enterprises in the United States financed more than four fifths of their outlays for plant and equipment from internal sources, and that most of this came from depreciation and

* Whether the distribution of the extra $100,000 in dividends would be legal depends upon the status of the surplus account. The distribution of the amount which should have been allowed for depreciation obsolescence would probably be illegal, unless there is adequate surplus to cover it, as it might then constitute a return of the capital and a fraud on the creditors. See discussion later in this chapter of the legality of dividends.

depletion.) During the eight-year period from 1937 to 1945 the gross property additions made by the electric utility industry amounted to approximately $3,000,000,000. "From the viewpoint of the combined industry, this entire sum was financed by amounts retained out of revenues either in the form of accruals for depreciation and amortization or as surplus earnings after payment of dividends on preferred and common stocks." †

Effects of extensive internal financing. The financing of so much of our business through internal sources has had several important effects. In the first place, it has helped to focus attention on the shortage of purchasing power as an explanation of business depressions. The company in our illustration had sales of $1,000,000, but according to the profit and loss statement it simultaneously returned only $850,000 to the people. If it does not fully invest the annual $100,000 depreciation and depletion allowances, to say nothing about the $50,000 earnings retained, there is a break in the continuity and flow of the purchasing power. The company would then receive from others more than it pays out. ‡

* See *Saving, Investment, and National Income,* Temporary National Economic Committee Monograph No. 37, pp. 50-58, and Part 9 of *Hearings before the Temporary National Economic Committee on Savings and Investment,* especially pp. 3571, 4026, and 4041. You will be particularly interested in the testimony of Mr. Stettinius, pp. 3576-98; of Owen D. Young of the General Electric Company on pp. 3598-631; and of Dr. Oscar L. Altman on pp. 3669-703. Some of the figures in Mr. Altman's testimony were subsequently revised in accordance with later estimates of the Bureau of Foreign and Domestic Commerce. See Monograph Number 37, footnote 37, p. 56.

† *The Financial Record of the Electric Utility Industry,* 1937-1945, Federal Power Commission, p. 6.

‡ The classical economists, particularly J. B. Say in France and David Ricardo in England, in the early part of the nineteenth century developed the "law of the market," according to which every act of production results in the creation of a corresponding amount of purchasing power for other goods and services. Thus, there was sure to be an effective demand for the total products. Moreover, all savings made by individuals tended to be automatically invested. Though Thomas Robert Malthus about 1821 challenged this doctrine, he was "out-talked" by orthodox economists. The classical doctrine of Say and Ricardo was dominant for well over a century and was only sporadically challenged by such writers as Karl Marx in the middle of the nineteenth century and by "monetary heretics," such as Major C. H. Douglas, shortly after World War I. The greatest blow to the classical doctrine was delivered by J. M. Keynes in 1936 in his *The General Theory of Employment, Interest and Money,* Harcourt, Brace & Co., 1936.

Major Douglas, to whom we particularly want to refer, placed a great emphasis upon the proposition that there is a tendency toward a permanent shortage of purchasing power caused to a large extent by the fact that corporations do not necessarily fully invest the allowances for depreciation. Therefore, more is taken from the consuming public in the form of prices charged than is

In the second place, internal financing aggravates the importance of involuntary saving. Decisions as to retention of earnings are made by the directors who, in the case of the large companies, have generally only a small investment in the business. The main body of stockholders as stockholders have little or no say in these decisions. The investment of the depreciation and other valuation reserves places still more power in the hands of the management.

Finally, this practice helps to explain the relatively small quantity of investment outlets open to the average possessor of surplus funds. By plowing back profits and by making adequate depreciation allowances and investing these reserves in new equipment and buildings, many companies have weaned themselves away from the usual sources of outside investment.

The development in this regard during the war years is significant and will have an important bearing upon the trend of future financing. In 1940 American business companies bought $12,100,000,000 worth of plant and producers goods, while they held back earnings and made additions to valuation reserves for a total internal financing of only $9,400,000,000. The excess of the amount spent over the internal financing, or $2,700,000,000, represented funds obtained from sources outside the companies.

During the United States' participation in the war, however, the situation was reversed. The retained earnings and depreciation reserves increased greatly, the rise being largely in the retained earnings, but the corporations reduced their outlays for plant and producers goods to such an extent that for a part of the last war year, 1945, the excess of these retained earnings and reserves over gross capital outlays was at the rate of about $9,000,000,000 per year.* It has been estimated that during the period 1942-44, "892 large manufacturing companies accumulated a deficiency in gross property expenditure in excess of $7,000,000,000." †

paid out and made available for the purchase of goods. As a remedy, advocates of social credit have suggested that industry charge lower prices than those dictated by the computation of total costs including depreciation and that the government pay subsidies to businessmen out of newly created money (not raised by taxes) to make up the difference. This "social credit" would preserve the balance between production and purchasing power. See G. D. H. Cole, *What Everybody Wants to Know About Money,* Knopf, 1933, Ch. VIII.

* Figures from *Federal Reserve Bulletin,* January, 1946, p. 113.

† Charles C. Abbott, *Financing Business during the Transition* (Committee for Economic Development Research Study), McGraw-Hill Book Co., 1946, p. 46. The estimate referred to was made by Wilson F. Payne Financial Research Program Staff, National Bureau of Economic Research.

This means that during the war there occurred a deterioration of corporate fixed assets, particularly of nonwar plants, which will ultimately have to be replaced. By not spending their depreciation reserves the corporations in effect sold their fixed assets without making any restoration or replacement. (If the assets of any of our business corporations are now not adequate or sufficiently liquid many of them will have to raise additional funds in the postwar period. Some of these will undoubtedly be raised internally, but large quantities will have to come from external sources.)

The legality of dividends. We have seen that the corporation is a legal entity and that the liability of the stockholders is limited to the amount they have contributed. Creditors do not, as a general rule, have recourse against the individual assets of the stockholders.

If this is the case, it follows that the corporation should normally retain the entire investment entrusted to it by the stockholders. It certainly should not be allowed deliberately to distribute any part of that amount. The contribution by the stockholder not only furnishes a sort of protective cushion for the creditors but it also helps to assure the continuity and financial responsibility of the corporation.

These principles lead logically to certain fundamental legal limitations on the payment of dividends.* These are:

1. Dividends should be paid only out of surplus.
2. A dividend should not be paid if the stock is impaired or if its payment will result in the impairment of the stock.
3. A dividend should not be paid while the company is insolvent, or if the effect of its payment will be to make the company insolvent.

1. *Dividends should be paid only out of surplus.* While this principle is, in general, true, it is important to consider the nature and origin of the surplus. All states permit the payment of dividends out of earned surplus, that is, the surplus which came from profitable operations or from the sale of various assets at a gain. This, in fact, is the common intended source of dividends. Capital surplus may, however, stand on a different footing. If it arose through the issuance of bonds or preferred stock at a price above par, this surplus, often earmarked as premium surplus or paid-in surplus, should prob-

* Bond and preferred stock contracts often contain "protective provisions," one of which may place certain restrictions on dividend payments. We do not have these in mind here but rather the limitations imposed by statutes or by the rules of the courts.

ably not be used as a basis of cash dividends. Such a dividend would really constitute a return of part of the capital. Many courts place restrictions on this type of dividend. Such capital surplus may, however, be distributed as a stock dividend, even if it arose through the sale of one form of security and is distributed to the holders of another type. Such distribution might be condemned as a diversion of funds from one group of security holders to another. Any surplus created by marking up the value of the assets, often earmarked "appreciation surplus," should not be paid out as a cash dividend, although it may legally form the basis of a stock dividend.

Now, let us assume that a surplus is created by the reduction of the par or stated value of the stock or by the decreasing of the number of shares through the proper agreement among or by consent of the security holders required according to law. The surplus so created is sometimes called "reduction surplus" or "decapitalization surplus." It should not be available for dividends, although there is some legal authority favoring its distribution. To safeguard themselves in this situation, corporations often use such reduction surplus to cancel out a deficit or to permit a direct write-down in the value of their assets. By eliminating the deficit or overvaluation of the assets in this way, the corporation will, in effect, preserve any existing earned surplus and may make new earnings immediately available for dividends. Many companies credit the surplus resulting from such downward adjustment of the stock to a special capital surplus.

A special problem sometimes arises if a company earns an income in a certain year, while it is already suffering from a large deficit from previous years due probably to prior operational losses. May such income for the year be used for dividends that year or must the past impairment first be made up? Many states require the impairment to be restored before dividends are legal, although some permit such income to be paid out. As just mentioned, corporations have at times wiped out this capital impairment by a properly authorized decapitalization, thus opening the way for any new earnings to go into earned surplus.

Now assume that a corporation has built up a sinking fund reserve which becomes useless after the bonds are paid off. May such reserve then be distributed as a cash dividend? In answering this question it is necessary only to point out that the sinking fund reserve came originally out of earnings or out of surplus. When it is returned to surplus, such restoration makes it for all practical purposes earned

surplus and, therefore, logically available for a cash dividend distribution. Contingency and free reserves, the use of which may or may not be necessary at the discretion of the directors and management, are generally available for cash dividends.

2 and 3. *The stock impairment and the insolvency rules.* These principles are closely related and may be discussed as a unit. Let us refer to a simple balance sheet.

Assets	$25,000	Bonds	$ 5,000
		Current liabilities	2,000
		Common stock, 100 shares, par value $100	10,000
		Earned surplus	8,000

The value of this company's assets is greater than the total debts of $7000. It is, therefore, solvent. The value is also greater than the total of the debts and the par value of the outstanding stock. Therefore we may conclude that the capital stock is not impaired. The company has an earned surplus. If the assets are in a form which can be distributed and if such action is considered desirable for the long-term welfare of the company, the directors may legally declare a cash dividend of as high as $8000.

Now let us assume that poor earnings, or fraud and bad faith on the part of the management, or a serious and prolonged business depression accompanying a steadily falling price level cause a deterioration of the assets of this company to such an extent that they are actually worth only $17,000. This means that the assets are barely enough to cover the debts and the stock. A cash dividend of $1000 on the common stock would now impair the capital by $1000 and would therefore be illegal, in spite of the fact that there is an earned surplus. Such surplus, as a matter of fact, is really only fictitious, since the assets are actually not worth the amount recorded for them on the books. Similarly, if the real value of the assets were only $12,000, the capital would already have been impaired and a further dividend would be illegal.*

* An exception to this rule has developed in the case of mining companies, whose assets are often steadily used up and not replaced. Such companies may compute their income without making allowance for such depletion. Dividends paid through or from income so computed are generally considered legal, even though they really constitute an impairment of capital. This return of capital is a characteristic of such industries and is presumably understood by purchasers of their bonds and stocks. See Chapter 8, page 124.

If, instead, the assets were actually worth only $5000, they would be inadequate to cover even the outstanding claims of $7000. The company would then be totally insolvent or insolvent in the bankruptcy sense, and it may not legally pay dividends.*

If a company does pay out illegal dividends, injured parties may, as a general rule, bring action for their recovery against the directors if they have been negligent or fraudulent in carrying out their action and against the stockholders if they received such dividends in the knowledge that they were illegal.

Summary. A corporation may raise funds from either internal or external sources. One way of internal financing is through the reinvestment of earnings. Among the arguments for the maintenance of a large surplus are: (1) It permits a corporation to expand; (2) It helps to provide independence of action; (3) It is necessary to enable the payment of steady dividends and wages; (4) It strengthens the credit position of the company.

In appraising these arguments, bear in mind that surplus is not a fund; it is not cash; it is not an asset. After all, the fundamental circumstances affecting a corporation's standing are the adequacy and steadiness of its earnings and the nature of its assets. A company may show a large surplus but possess no ability to pay dividends or steady wages; it may even have a poor credit standing and possess little independence of action.

The withholding of income by a corporation constitutes involuntary saving by the stockholders. Theoretically, of course, the stockholders through their election of the directors have something to say about dividend policy. Actually, however, the directors are an independent body and, (as we shall see later) in the large, widely held corporation, they are only nominally chosen by the stockholders. Some authorities have even argued that a going corporation should pay out most of its earnings as dividends thus giving the stockholders, rather than the corporation, a chance to invest them. The policy

* If the company's highly specialized fixed assets were worth, say, $5000, and the current assets were listed at $3500 (inventories $1000, receivables $2000, cash $500), the company would appear to be solvent, since the value of the assets exceeds the debts. If, however, only $500 of the current receivables were collectible reasonably soon, the others being "frozen," and if the market for its goods was slow, the company might not be able to pay its interest or its current liabilities as they fall due. This condition is often described as "financial insolvency" or temporary insolvency. (See footnote, page 229 of Chapter 13.) The courts are not in agreement as to which of these forms of insolvency shall be used in determining the legality of dividends. A good argument could be advanced for making total insolvency the basic test for this purpose.

of surplus accumulation, in so far as it obviates the necessity of selling new securities, gives the corporation a false protection against appraisal by the money markets of its efficiency in the use of funds in comparison with other companies and industries.

An even more important method of internal financing than surplus accumulation occurs through the building up and the investment of valuation reserves. A valuation reserve comes about through a charge to expense but such expense account is merely a bookkeeping entry and in itself involves no immediate expenditures of cash. The price charged for a product must in the long run, however, equal all the costs and expenses, including the annual amounts set aside for depreciation and obsolescence. This means, in effect, that a company is taking in money which it has not yet spent. The ultimate investment of this excess in new plant or equipment constitutes an important form of internal financing.

The widespread financing of business through internal sources has focused attention on the relation between purchasing power and business, particularly on the concept of "social credit." It has aggravated the problem of the power and position of the directors and of the management in the use of "other people's money." It helps to explain the relatively small quantity of investment outlets open to the average possessor of funds. During World War II many corporations did not spend their depreciation reserves. This means that they had in effect sold some of their fixed assets without restoring or replacing them. Such omission will have an important influence upon the trend of financing in the future, as the shortage in replacement and improvements will have to be made up in some way, perhaps through external financing.

Capital stock is intended as a backing for the creditors and as a way of assuring all the security holders, including the stockholders, of the continuity and financial responsibility of the corporation. Out of this fact comes the principle that a corporation, as a general rule, has no legal authority to pay dividends out of capital or to pay dividends while the company is insolvent or if the effect of such disbursement will be to make it insolvent. There is only one basic and logical source of dividends, namely, earnings and earned surplus or unappropriated reserves created out of them. The other forms of surplus may at times be paid out as stock dividends or less often as cash dividends, but there are many limitations as well as confusing variations among the statutes and court decisions on their use for these purposes.

PROBLEMS

1. At a stockholders' meeting of the United States Steel Corporation Judge Gary justified the withholding of dividends on the following grounds: (*a*) to seize upon chances to buy extensions; (*b*) to make improvements; (*c*) to take all business offered which was acceptable without borrowing.

He went on to say: "This was emphatically true during the panic of 1907. We then had seventy-five or eighty million dollars in banks, and I think I may say properly that our cash at that time assisted very materially in preventing the further and dangerous demoralization which existed in financial circles in New York."

a. Did Judge Gary include all the orthodox reasons or motives for the accumulation of surplus?
b. Was he arguing so much for a large surplus as for a "liquid position"?

2. Indicate the probable or theoretical influence of each of the following upon the surplus-accumulation policy of a corporation. (Some of these may offset each other even in the same corporation.)

a. The nature of the industry—that is, whether it is public utility, industrial, etc.
b. Ease of access to financial markets.
c. The provisions of the tax laws, including special taxes on corporations and the rates of tax on individual income.
d. The power and influence of the professional management.
e. The closeness or effectiveness of public opinion.
f. The stage of the business cycle.
g. The degree of competition in the industry.
h. The interest of the stockholders and their ability to follow the affairs of the corporation, for instance, through stockholders' meeting.
i. The nature of the capital structure, exclusive of the surplus accounts.
j. The dynamic or static character of the industry.

(See Elwood Amos, *The Economics of Corporate Saving*, University of Illinois Press, 1937, Ch. IV.)

3. During the severe depression of 1929 many corporations maintained their working-capital position, or, as some would put it, they maintained their net current asset position in spite of the fact that

they were making small profits, were obtaining very few funds on the external investment market, and, in some cases, were paying dividends even though not earned. How could they do this?

4. Referring to table "Corporate Funds Derived from Corporations and Available for Capital Formation, 1926 to 1935," Appendix I, discuss the following points:

a. What is the meaning of the minus sign before the corporation savings for some of the years?

b. What is meant by "Funds Available for Capital Formation"?

5. The table below gives the percentage of sales retained for depreciation and the percentage retained from earnings for a large sample of American corporations for 1946 and compares these with the indicated total of both for 1945.*

Industry and size	1945 total retained	1946 total retained	1946 retained for depreciation	1946 retained from earnings *
Manufacturing				
Durable goods				
Small	3.3	4.5	1.2	3.3
Medium	2.5	5.3	1.5	3.8
Large	4.8	3.9	2.6	1.3
Nondurable goods				
Small	2.1	4.1	0.6	3.5
Medium	2.7	5.1	0.9	4.2
Large	7.7	7.8	2.9	4.9
Trade				
Wholesale				
Small	1.5	2.0	0.2	1.8
Medium	1.0	2.2	0.2	2.0
Large	1.3	2.9	0.2	2.7
Retail				
Small	3.1	3.4	0.4	3.0
Medium	2.3	3.7	0.6	3.1
Large	1 5	3.5	0.6	2.9

* After taxes and dividends.

* Statements and table are from Albert R. Koch and Charles H. Schmidt, "Financial Position of Manufacturing and Trade in Relation to Size and Profitability, 1946, *Federal Reserve Bulletin,* September 1947, pp. 1091-1102.

a. How does the percentage of sales retained for depreciation in the case of companies engaged in trade compare with that in the case of manufacturing companies? What are the reasons for this difference?

b. The authors of this study define a small business in manufacturing as one with total assets under $1,000,000 and a small business in trade as one with assets under $250,000. A large business is one with assets of $10,000,000 or more manufacturing or $1,000,000 or over for trade. Is there any difference between the policies of small businesses and large businesses in the proportions of sales retained for depreciation and retained from earnings?

6. The belief that the largest portion or perhaps even all of the financing by corporations can be done through depreciation reserves and the retention of earnings is essentially a pessimistic and "stagnation" theory. Do you agree? (See George Terborgh, *The Bogey of Economic Maturity,* Machinery and Allied Products Institute, 1945.)

7. "A corporation cannot make a valid contract to pay dividends on preferred stock otherwise than from profits." (*Guaranty Mortgage Co.* v. *Flint* (1925), 66 Utah 128, 240 Pac. 175. While this statement is in general true, would you say that the company is limited in its dividends to this year's profits? Suppose the company had created a surplus by recapitalizing or by decapitalizing—that is, by stock dividends in reverse or a split-up in reverse. Would surplus so created be available for dividends? Reword the above statement so as to make it more accurate.

8. A manufacturing company has assets valued on its books at $40,000. Its liabilities are $18,000 and its capital stock has a total par of $12,000. The earned surplus is $10,000. Assume that the assets are overvalued by $10,000. The company now earns a net income of $2000, but it allowed no depreciation, which should have been $1500. The directors pay a cash dividend of 10 percent on its stock. Is this dividend illegal?

Would your answer have been the same if the assets, according to sound standards, had been worth $40,000? What would be your answer if the assets were actually worth only $15,000?

Chapter 15

Financing from External Sources

THOUGH much of the financing of corporations is done through the investment of earnings and valuation reserves, the raising of funds from outside sources is always an alternative. Each new corporation must at the outset obtain its funds from the outside; most established companies, from time to time, turn to external sources.

Funds raised outside the corporation come either from persons already connected in some way with the company or from those who, up to that time, are strangers to the organization. In the first category are employees, customers, and stockholders. Corporations may raise funds from all these groups.

EMPLOYEE OWNERSHIP

Employee stock ownership is a comparatively recent development. Before 1900 only five companies had instituted such a plan. Under several early profit-sharing plans, the workers were given stock to cover their share in the profits. The idea of selling stock to employees became especially common during the 1920's. By 1935, however, most companies had discontinued their plans.* Nevertheless, important corporations are encouraging such ownership, and it seems

* At least 300 employee-ownership plans were instituted during the period from 1915 to 1927, and in the latter year there were 806,000 employee stockholders in the United States. It has been estimated that in 1930, perhaps the high point of such ownership, the employee stockholders numbered at least one tenth of the aggregate of all stockholders. These holders, however, held only 1 percent of the total stock outstanding. See *Employee Stock Purchase Plans in the United States,* National Industrial Conference Board, 1928, p. 2 (this thorough report gave figures for 315 plans in effect in 1927); *The Security Markets,* Twentieth Century Fund, 1935, p. 57; A. A. Berle and G. C. Means, *The Modern Corporation and Private Property,* Macmillan Co., 1932, p. 59; Emanuel Stein and Jerome Davis, *Labor Problems in America,* Farrar & Rinehart, 1940, pp. 478-80.

advisable to analyze the reasons for the early popularity and later decline of this method of raising funds.

Employee stock ownership was hailed by some social idealists as an economic revolution which would solve the problems of labor and capital.* Make the employee an owner! What could be simpler? Advocates of employee stock ownership argued that it encourages the worker to save, makes him more interested in the company, furnishes an incentive to discover methods of increasing efficiency, helps to reduce labor turnover, and tends to bridge the gulf between labor and management. These alleged advantages, however, are offset by some serious practical considerations that have definitely dampened the enthusiasm of both the worker and the employer.

Labor's attitude. Labor leaders frown upon employee stock ownership because it tends to divide the worker's allegiance to the union.† There are other and better ways, they say, of stimulating a worker's interest in the efficiency of his company. At best, they point out, the employees of a large company can hold only a very small fraction of the total stock. Rarely do the employees buy enough total stock to give them representation on the board of directors. In a large company the worker is better off if he sticks to his bench, supports the union, and works directly for his own interest as an employee. Many labor leaders think employee stock ownership weakens collective bargaining and reduces the dignity and independence of labor.

Moreover, employee stock ownership violates the principles of diversification. Ordinarily if a company goes bankrupt the worker may lose his job. If the worker is also a stockholder, he may lose both his job and his savings. A worker who spends a great part of his life in one type of position for one employer should not invest his savings with the same employer. He should diversify by placing his savings with some other institution. ‡

* See, for instance, T. N. Carver, *The Present Economic Revolution in the United States,* Little, Brown & Co., 1925.

† Gustavus Meyers says of the early stock ownership plan of the United States Steel Corporation: "The Steel Trust made a systematic campaign of inducing its employees to purchase stock. This furthered the double purpose of disposing of the vast amounts of stock, watered and otherwise, and of gulling the workers into believing that they, individually owners of a share or two, had a proprietary interest in the success of the corporation. The program now was that of making employees 'corporate minded.'" *History of the Great American Fortunes,* The Modern Library, Random House, 1936, p. 604.

‡ Incidentally, a strong point of the federal social security system, as contrasted with individual employers' pension plans, is the fact that when the "premiums" are placed with the United States government the worker is freed

Experience of companies. Employers are not enthusiastic about their experience with employee stock ownership plans. Workers—and that takes in most of us—always want things to come their way. They want to share in the profits but are unwilling to help bear the losses. The tremendous drop in stock-market prices beginning in 1929 reduced the value of many shares held under employee stock ownership plans. This loss of value created an antagonistic spirit in many workers, who often demanded that the company take the stock off their hands at the purchase price. The danger of employee stock ownership becoming a boomerang chilled the enthusiasm of many employers for the practice.

If, on the other hand, the price of the stock rose substantially after he had acquired it, the employee—like anyone else—felt puffed up, and frequently sold his stock and spent the proceeds. To prevent this, some company plans, for example, the early Procter and Gamble system, included a provision that the stock could not be sold until it had been held a designated number of years. The theory behind this was that the employee, after owning the stock for some time, would consider it a permanent asset and would be willing to part with it only under the most extreme conditions.

Stock issued to employees often involved the company in special obligations that usually do not accompany the sale of even the same kind of stock to the regular stockholders. Some companies set up a special reserve to redeem any stock offered back by the workers in the event of a break in the market. Such redemption tended to reduce surplus and thin out the equity of the stocks held by regular holders who, of course, had no right to demand their purchase price. Employees would raise a clamor if dividends were not regularly paid, perhaps not a greater clamor on the whole than that by the other stockholders, but it seemed louder because it was nearer and better organized. The passing or omission of a dividend often affected the attitude and loyalty and, therefore, the efficiency of these stockholders as workers.

Employee stock ownership may also limit the independence of action of the management, not only in regard to dividends but also as to future financial policy. Should it seem advisable to issue bonds or preferred stock ahead of the common, there is likely to be a loud

to that extent from any business risk specifically facing his employer. Moreover, under the Federal social security system the employee is at liberty to move from place to place or from employer to employer without losing any part of his "stake" in the social security fund.

protest. Should it seem advisable to reduce or pass the dividends, even though earned, in order to build up a surplus account, there may be bitter murmurs of discontent. If the security owned by the employees happens to be callable preferred stock, any attempt by the company to call it, especially if the call price is below the market price, may be considered by the stockholder as a betrayal of his interests.

To avoid any contingent liability of stockholders to creditors, the company must receive at least par for any newly issued par stock sold to employees. In order to facilitate a sale below par, some companies accumulate treasury stock to be later disposed of at any price they think favorable to the employee. If the employee has to pay the prevailing price he may not feel appreciative, as he could buy it on the market himself. If, on the other hand, the company gives a rate substantially below the market or if it matches or partly matches each $1 purchase with a contribution of its own, the effect is to dilute the equity of the old stockholders.

If there is any friction between the employer and the employees, or if the problems of organization and bargaining are being considered, a company might hesitate at that time to initiate a new employee stock ownership plan. Such innovation, especially if there are already charges of unfriendliness toward the union, might be challenged as an attempt to influence or coerce the employees contrary to the provisions of the National Labor Relations Act.

Some examples may be found of producers' cooperation, under which the "employees" become both the workers and the sole or controlling owners. The voting common stock of the Dennison Manufacturing Company, for instance, may be held by employees only. The management and workers must turn in their stock when they cease to be employees and receive in exchange a special Class A common stock which has a voting right on extraordinary matters only, such as amendment of the charter or dissolution or sale of the main assets of the company.* The preferred nonvoting stock of Fuller Brush Company is held almost exclusively by the employees.

CUSTOMER OWNERSHIP

Customer ownership, particularly of nonvoting and nonparticipating cumulative preferred stock, became very common among public

* *Moody's Manual of Investment—Industrials,* 1945, pp. 424-25.

utilities during the 1920's.* The time of this development, the nature of the industry concerned, and the form of the securities so sold were not due to mere chance or coincidence. World War I, with its frequent sale of Liberty and Victory bonds to the people, had made us security-conscious. The later redemption of many of these bonds gave numerous individuals extra funds to invest. We had become anxious to own stocks and bonds and to receive dividends and interest. Common stocks were beginning to rise rapidly, and many investors turned toward the preferred stock as a form of investment for their funds.

In the midst of these developments the public utilities perfected an idea. Why not sell stock to the customers? The securities could be sold by their own employees on a commission basis. The customers of a utility are closely concentrated geographically and easily contacted. They know from experience that their utility bills vary little from year to year and that the revenues of an operating company tend to be steady. The customers often see their company in action, and they would become excellent "grandstand coaches." The public was not generally friendly to the utilities, and it was felt that the customers, turned into stockholders, might become powerful ambassadors of good will. The steady flow of funds from these customers-investors might easily take care of any routine expansions made by the companies.

But the promoters saw to it that the new stockholders did not have the actual control or the right to residual earnings. Holding companies owned or were seeking to control the common stock of many operating companies. The leaders of the industry found that they could sell nonvoting and nonparticipating preferred stock to the customers without scattering the control and without thinning out the rights of the common stockholders. As a concession to the customers, the issuing companies generally made the preferred stock cumulative.

After reaching its peak in 1927, customer ownership continued for several years as a significant external source of funds especially for utilities but in a smaller degree for other industries. By 1935 it had dried up as an important investment medium. Since companies may again flirt with the idea of selling securities on a large scale to

* A survey covering more than nine tenths of the electric utilities in the United States showed about one fifth of the total financing between 1920 and 1930 was done through the sale of securities to customers. Floyd F. Burtchett, *Corporation Finance,* Harper & Bros., 1934, p. 462.

their customers, it is appropriate to discuss here important advantages and disadvantages of this method of financing.

Advantages and disadvantages of customer ownership. Advocates point out that customers as stock owners are good advertisers for the company's services and furnish a buttress against adverse public agitation and regulation.* They point out that such financing can be steady and can satisfy a large proportion of the company's normal demand for ordinary routine capital extensions. By making use of an already existing or easily built-up selling organization the company reduces its cost of financing. Moreover, since customers seem to be willing to accept stock, the company can preserve a proper balance between bonds and stock in its capital structure.

Against these points of advantage may be set serious weaknesses. The bitter experiences of many companies have shown that preferred stock sold to customers tends to become a fixed-charge security. A company may virtually be forced to pay out precious cash as dividends at a time when it should conserve its liquid assets. Customers, like employees, may be unwilling, or unable, to stand the risk attendant upon stock ownership. It is also hard to see how the owner of a half-dozen shares of preferred stock paying $5 each in dividends would benefit himself by opposing substantial rate reductions especially when there are many larger stockholders. Since the preferred stock was generally nonparticipating, these holders had nothing to gain, after a certain point had been reached, from increased revenues or increased efficiency.

Labor organizations often oppose customer stock ownership on the ground that it tends to prejudice the public against the workers in case of labor difficulties. Security regulatory agencies frown upon the issuance of nonvoting stock, a ban that may be extended to nonvoting preferred stock. To the frequently advanced suggestion that treasury stock be sold to the customers, the objection is raised that such stock may not be available in sufficient quantities. In short, customer ownership has so many weaknesses that in the final analysis corporations cannot depend upon it as an important source of new funds.

* W. Z. Ripley, in *Main Street and Wall Street,* Little, Brown & Co., 1927, p. 345, cites the following "sales talk" by an employee-customer owner of one of the Electric Bond and Share companies: "These are the finest shares in the world. . . . They are not like stocks in mines, patent machines or flying machinery, which sometimes you see, but generally you don't. But with this stock push the button, and if the light shines, you know your money is safe."

THE STOCKHOLDERS

As we have already seen, one of the general principles of corporation finance is that, in the absence of special circumstances or charter or statutory provisions, the proportional shares of the existing stockholders in dividends, in voting, or in residual assets cannot be changed without their consent. Ordinarily common stock and other voting and participating shareholders possess the pre-emptive right —that is, they have first chance to subscribe to additional shares issued by the corporation. This right is evidenced by pieces of paper often called "warrants" which are sent to the old holders when a decision has been made to issue such new stock.

Nature of a right. The nature of the right can be made clear by an illustration. A company has outstanding 100,000 shares of common stock. It decides to issue 25,000 additional shares of common, giving the old stockholders of record, say, as of January 10, 1948, the right to purchase the new shares at a stated price. Since the holders of 100,000 shares may buy 25,000 new shares, the holder of 4 old shares will have the right to buy 1 new share. Or, to put the matter in another way, each of the old shares carries with it the right to buy ¼ share of additional stock. Let us assume that the stock sells at $200 per share on January 5, five days before the day of record. These old shares are, therefore, bought and sold in the market with "rights on," in much the same way as the price of a share of stock on which a cash dividend has been declared includes any dividend which has accrued up to the time of the sale.*

Value of a right. Whether this right has any value depends upon the relation between the subscription price and the market price. In our illustration, if the subscription price—that is, the price at which the new stock is offered—is above the market price, say $210, the right has no value whatever. Anyone interested in obtaining the stock can do better by buying it on the market at $200 than by paying the corporation $210 for it. On the other hand, if the subscription price is below the market, say $150, the right appears to have a substantial value.

The amount of such value depends upon the spread between the market and the subscription price and upon the ratio between the number of the old shares and the additional new shares. In our illustration, since 1 new share is offered to the holder of 4 old

* For discussion of ex dividend dates and other technical features in connection with stock-exchange procedure, see Chapter 23.

shares, the ratio is 4 to 1. When the right is exercised, the number of shares becomes 4 + 1 or 5—that is, for every 4 shares before there will now be 5, if all the rights are exercised.

Let us now assume that the subscription price is \$150 and that the holder of 4 shares of old stock exercises his right to buy an additional new share at this figure. One feels tempted at first to say that he "makes" \$50 on the deal, since he gets a \$200 share for \$150, but the transaction means that there will be 5 shares outstanding where there were 4. The theoretical or "parity value" of the right carried by 1 of the old shares of stock, therefore, becomes the difference between the market price and the subscription price, or \$50, divided by the sum of 4 + 1, or 5. The value is, therefore, \$50 ÷ 5 or \$10. The commonly accepted formula is

$$V = \frac{M - S}{R + 1}$$

in which V is the mathematical or parity value of the right, M is the market price of the stock, S is the subscription price, and R is the number of old shares needed in order to give the right to obtain 1 additional new share.* The 1 in the denominator refers to this increase of 1 in the number of shares. If, to take another illustration, the shareholder had the right to subscribe for 1 new share for each 2 held, the R would be 2, and the denominator would read 2 + 1. If, again, the shareholder had the right to subscribe for 2 new shares for each 1 share held, the R would be ½ and the denominator would read ½ + 1.

To return to our illustration: Assume that a person who is not a stockholder on January 5 wishes to acquire 5 shares in the corporation. He can do so in two ways. In the first place, he can pay \$800 on the market for 4 shares, each carrying a right (rights on). He can then at the proper time use the 4 rights plus the subscription price of \$150 in cash to buy another share in the company. When he gets through, he has his 4 old shares plus 1 new share, a total of 5. These cost him \$800 + \$150, or \$950. Their average value is \$190. All of these now are ex rights, or rights off. The rights connected with the 4 have been used and the fifth share, coming after the day of record, never had this specific privilege.

In the second place, this would-be stockholder can buy the rights or "warrants" on the market and then purchase all 5 shares directly from the corporation. To be able to acquire 5 shares at the

* In many of the formulae the symbol N is used instead of R.

subscription price of $150 he will need 20 rights—that is, the rights connected with 20 old shares of stock. The supply of these rights on the market comes from those old stockholders who decide not to exercise their privilege. As already computed, the value of a right is $10. Armed with twenty of these, which cost him a total of $200, he now pays the corporation $150 each for 5 shares or $750. His total investment is thus $200 + $750 or $950, or $190 for each of the 5 shares. These have rights off or are ex rights. It will be noted that when the stock becomes ex rights or rights off, its market price falls theoretically by the value of the right in the same way as a share of stock on which a cash dividend has been declared falls on the ex dividend date by an amount theoretically equal to the cash dividend.

Though the right may have a value on the market, it really has no inherent positive value to the stockholder. Suppose a person is already the holder of 4 shares of stock worth $200 per share in the market. He exercises his right—that is, he buys a new share for $150. He "gains" $50—that is, he gets a $200 share for $150. But he loses $40 in that each of his old shares falls $10 in price. A gross gain of $50 against a loss of $40 makes a net gain of $10, the value of a right. But wait! He does not get a $200 share for $190. It was really worth only $190, since it falls in value with the others. Thus the gross gain was $40 or the difference between $190 and $150. The loss was $40. The net gain is 0. The value of the right, therefore, is 0.

If the value of the right is 0, it will be asked, how can it sell on the market for $10? The paradox is easily solved. The $10 is not a positive value. It is not something which the stockholder *gets* if he exercises his right or if he sells it to others. It is something which he *loses* if he neither exercises nor sells his right. If the stockholder exercises his right, his act becomes equivalent to the buying of $^{150}/_{200}$ of 1 share at market, while the corporation hands out a stock dividend of $\frac{1}{4}$ of a share for each 4 shares held.

Assume the following simple balance sheet:

Assets	$200,000	Common stock, 1,000 shares, par $100	$100,000
		Surplus	100,000

The book value is $200 per share.

The corporation now issues rights to buy 1 new share of stock for each 4 held at a subscription price of $150 per share. When the stockholders have exercised their rights, the balance sheet will read as follows:

Assets (including $37,500 received for the additional 250 shares at a price of $150 per share)	$237,500	Common stock, 1,250 shares par $100	$125,000
		Surplus	112,500
			$237,500

The book value is now $190 per share.

Another way of putting this is to recognize that in effect $^{150}/_{200}$ or three fourths of the 250 new shares, that is $187\frac{1}{2}$ shares, were bought at $200 per share, to give a balance sheet as follows:

Assets (including $37,500 in effect received for the $187\frac{1}{2}$ shares at $200 per share)	$237,500	Common stock, $1,187\frac{1}{2}$ shares	$118,750
		Surplus	118,750 *

* Computed as follows: The original surplus is $100,000. The sale of $187\frac{1}{2}$ shares, par $100, at $200 each increases the assets by $37,500, increases the total common stock par by $18,750 and increases the surplus by $18,750.

In addition the corporation may be considered as having distributed a stock dividend of $\frac{1}{4}$ of a share for each original 4 shares held, or a stock dividend of $62\frac{1}{2}$ shares. The issuance of this stock dividend will increase the total par of the stock by $6250 and will correspondingly reduce the surplus by $6250. The balance sheet will then become:

Assets (no change)	$237,500	Common stock, 1,250 shares	$125,000
		Surplus	112,500

The stockholder who exercises his right thus really buys $\frac{3}{4}$ of a share at full price, simultaneously receiving a stock dividend of $\frac{1}{4}$ of a share. The stock dividend represents no income to him. It thins

out all the shares, but the stockholder does maintain his relative position in the company.

If, instead, the stockholder prefers to sell his rights rather than to exercise them himself, he really disposes of $10 of the equity behind each of his old shares. This corresponds, in effect, to a *cash* dividend. If he holds 4 shares, he receives $40 in cash for the rights, but the exercise of these rights causes his 4 shares to lose a total of $40 of their value. The purchaser of these rights pays the seller $40 for them and then gives $150 to the corporation for a share worth $190. The $40 of stock value relinquished by the old holder is in effect transferred to the new shareholder and for this $40 the old stockholder received $40 cash.

Assume, however, that the old stockholder neither exercises nor sells his rights. In such case he loses $40, for the value of his net investment in the company has fallen by that amount, with no corresponding compensation either in cash or in adjustment of the number of shares held. The other shareholders are obviously benefited by such negligence. The value of a right may thus be regarded as the amount of the stockholder's *loss* if he neither sells nor exercises his right.

Time limit for rights. The time limit for the exercise of rights must be sharply defined by the corporation. If the stockholder or the purchaser of the rights does not act within the specified period, the right to subscribe is forfeited. The corporation in such event may generally sell such uncalled for stock on the market at whatever price it can get. The corporation must, accordingly, give adequate notice to the stockholders of the issuance of the rights. If such notice is not given, or if reasonable efforts are not made to get it to the stockholders, the company may be held for negligence.*

* The case of *Hoyt* v. *Great American Insurance Co.* (1922, N. Y. Supreme Court, Appellate division), 194 N. Y. Supp. 449, involved a corporation stockholder who lived in Yokohama. The books of the corporation showed the Japanese address. The stockholder had ordered his dividends to be sent to a certain United States bank. The corporation decided to increase its capital stock from $2,000,000 to $5,000,000, and to offer this additional stock to the existing stockholders at $150 per share, a subscription price which was below the market price. The right to subscribe, therefore, had a value. The corporation secretary wrote to the stockholder at his Japanese address telling him about the action of the board. He enclosed a subscription warrant for the new stock, and warned him that if the rights were not exercised by a stipulated time, the stock would be sold on the general market. The company also sent a similar notice to the bank to which the dividends had been sent. The bank informed the corporation that the stockholder had left Japan and was on his way home and that inquiry should be made of a certain law firm which was

Limitations in use of right. There are limitations upon the use of the right. The market price of the stock ought to be higher than the par value. We have already seen that, as a general rule, if stock is issued at less than par the purchaser may be contingently liable to unpaid creditors for the unpaid portion. If the subscription price is to be at least par, the market price must exceed that if the right is to have any value. If there is a legal minimum as to the stated value in the case of no-par stock, the subscription price must be higher than such stated figure. A corporation whose common stock fluctuates widely, either because its market is thin * or because the stock is highly speculative, will find obstacles in the way of financing by means of rights. Extreme fluctuations can easily wipe out the spread between the market price and the subscription price and thus destroy the value of the right.

As a general rule companies attempt to avoid making the *R* in the formula too small. If the *R* is 1, for instance, a holder would have to buy 1 extra share for each share held, thus doubling his number of shares. Many stockholders may not be willing or able to make the relatively large additional investment and would, therefore, be forced to sell their rights. They would, in effect, be squeezed out of their old position in the company. Indeed, this might have been the purpose of the management. A larger *R*, say 10, meaning that 1 new additional share is offered for each 10 old shares, might be fairer to the typical stockholders. If the company wants to raise very large quantities of capital, the rights could possibly be issued more frequently. Of course, if the *R* is 10, the holder of, say, 7 shares may either have to sell his rights or buy additional rights in order to be able to exercise. If he sells his rights, his standing in the company will be altered, but the small stockholder seldom is concerned with his relative position in the company. In any case, a person with lim-

taking care of the stockholder's business. The corporation then wrote this firm asking if the stockholder wished to exercise his right. No answer was received, and when the subscription period had ended, the company sold the new shares on the public market. The stockholder later died, and his estate sued the corporation for the loss. The court held that the corporation was not liable for damages since it had made every reasonable effort to notify the stockholder of the subscription privilege.

* The market for a stock is thin when the number of shares in the "floating supply" is low. In such a case even a slight change in the amount which people seek to buy or to sell may have a relatively great effect on the price. (By floating supply is meant the excess of available shares over and above the current investment demand. Such floating supply is often in the form of "street certificates" passing from hand to hand by indorsement or by mere delivery.)

ited available cash would have a better chance of acquiring 3 extra rights and then buying an additional share than he would have of purchasing 7 additional shares if the *R* were fixed at 1.

Underwriting of rights. Subscription rights are frequently underwritten—that is, the exercise of the rights may be insured or guaranteed by some investment banker engaged in that line of service. One reason for financing through stock rights, of course, has been to avoid the cost of underwriting. On the other hand, there is always a possibility that the stockholders will not exercise their rights. The price of the stock for various business, financial, or political reasons has sometimes fallen so severely during the subscription period that the value of the rights was destroyed. Numerous shares allotted for sale are, therefore, not taken by the stockholders. If their sale has been insured, the issuing company is certain of obtaining the funds on which it had planned, because the underwriter will take the unsubscribed shares off the corporation's hands at the subscription price. The underwriter can then dispose of those shares immediately or it can hold them as it sees fit.*

INVESTMENT BANKERS

Most widely held corporations have occasion to raise funds by issuing securities to the general public. Decisions to raise such funds must often be made in a hurry, and corporations need to be sure funds are available immediately. This need has helped to give rise to a financial middleman—the investment banker.

Functions of investment bankers. In commodity marketing the functions performed by the middlemen and dealers vary greatly with the nature of the business and with the individual circumstances; so too in investment banking the functions performed by the various types of bankers differ widely. The main functions of the investment banker may, in general, be grouped under five heads:

1. He may originate, or aid in originating, new securities.
2. He may underwrite the issuance of new securities—that is, insure or guarantee their sale.
3. He may act as an intermediary between the issuer of securities and the purchaser or investor.
4. He may buy securities outright with a view to their later resale.
5. He may act as a promoter in helping or inducing companies to form combinations or working agreements with others and may

* An illustration of financing through rights will be found in Appendix J.

serve as an agent for the exchange of securities in the case of recapitalization or reorganization.

These functions carry with them numerous related duties. The originating underwriter, for instance, will make contact with the corporation planning to issue securities and investigate its business and financial record and prospects. It will help in planning the details of the issue, such as the form of the security, the terms of the identure, the interest or dividend rate, and the price at which the stock or bond should be sold. All these matters call for extensive research, the results of which may be used for the benefit of both the issuer and the buyer of the securities.

Investment bankers do not always perform the same functions. At times a banker may be both an originator of an issue and an underwriter; then again he may be an underwriter without being an originator; on still different occasions he may be neither. Frequently he acts as a mere intermediary or dealer or functions as an agent for the exchange of securities in a consolidation or in reorganization. The originator, as already stated, makes the contact with the corporation and is the manager of the issuing and selling process.* If the "originating house feels that the issue is larger than it cares to handle alone, or if it wants to encourage other originators later to return the favor, it will informally call on other bankers and form them into a syndicate or joint venture, a sort of partnership organized for the specific purpose of originating and disposing of this specific issue. The originating house is the "manager"; the other members are the "participating members." It is not uncommon for a syndicate in the case of large issues to include fifty to seventy-five or even more members.† The manager in one issue may, of course, be only a participant in another.

The securities are now disposed of to the dealers,‡ who may be,

* The position of the investment banker has again been brought into the limelight by the suit of the United States government against seventeen of the leading underwriters, charging monopolistic practices and conspiracy.

† One of the largest syndicates was that formed for the distribution of the unsubscribed portion of an issue of 800,000 shares of common stock of Bank of America offered to the old stockholders. There were 142 firms in the underwriting syndicate, headed by Eastman, Dillon & Co., and 197 dealers in the selling group.

‡ The originating group or syndicate passes on to dealers the work of selling the securities because (1) it is desirable to shorten the time between the issuance of the securities and the final sale; (2) a comparatively small change in the money market or other business movements could easily wipe out the margin of profit or cause a loss; (3) the use of dealers located throughout the

but probably are not, members of the syndicate. These dealers buy the securities outright, intending to resell them to the investor. Such dealers actually own the securities. They must be differentiated from brokers, who merely act as agents for buyers or for sellers. The differential between the price paid by the final purchaser and the proceeds received by the issuing corporation represents the gross profits to all the middlemen involved. This figure is frequently around 1 to 2 percent for bonds and somewhat higher, often 5 to 7 percent, for stocks. The prospectus issued by the corporation and the bankers must reveal the exact amount to be received by the issuing corporation. Each investor or purchaser of the securities thus knows the originating and distribution costs.

The word "underwriting" has several usages today. It is frequently employed in the sense of "insuring" the sale. The originating house, or the syndicate if the originating house invites participants, agrees to purchase any unsold balance of a security issue which the issuing company may attempt to sell through some other channel. An illustration of this occurs when a company finances by means of rights. If the stockholders do not exercise the rights, the underwriting syndicate takes up the unsold stock, pays the company the subscription price for it, and then, generally, proceeds to sell it on the market or through dealers. This contract of insurance involves a risk which is paid for by the corporation issuing the stock in much the same way as a person pays an insurance premium. This is the strict dictionary definition of the term "underwrite."

The term "underwrite" is very likely to mean the actual outright purchase of the entire security issue by the manager or by the syndicate, which then resells it to the dealer group. The company gets the money immediately. It is insured against any risk of the issue not selling. The investment bankers in this case are also said to "underwrite" the issue.

Position of investment banker. The investment banker, at least during the decades of the 1930's and the early 1940's, seems to have lost his dominant position in finance and investment. Among the reasons for this decline are the following:

1. The tendency of many corporations to rely predominantly on internal financing. It has been stated that even in 1929, a boom year, only some 10 percent of the country's gross commitment for plant and other capital goods came from investment banking. The fact

country tends to make for a wide distribution of the securities. See "Investment Banking" in *Encyclopedia of the Social Sciences*.

that many corporations have maintained a high degree of liquidity of their assets adds to this independence of the money market. Incidentally, such liquidity also enabled corporations for a long time to reduce their borrowings from the commercial bank.

2. The increased tendency of corporations to place their securities, particularly bonds, directly with institutional investors, such as insurance companies. One of the severest jolts to Wall Street came with the private placement with insurance companies of $125,000,000 of General Motors Corp. 2¼-percent notes in the summer of 1946.* Though many such issues are underwritten by investment bankers who dispose of them to insurance company bidders, some insurance companies and other institutional investors have built up their own investment organizations which approach the problem of analyzing a borrower's credit and originating a security in practically the same way as a large underwriting firm. The effect has often been to by-pass the established channels of distribution, but many alert investment bankers today are attempting to serve as an intermediary between the corporation and the institutional investor.

3. The increased United States government financing of private projects. Government funds are often lent to private individuals. In such case the investors of the country buy bonds direct from the government, or from government fiscal agencies, which in turn, lends to companies either directly or through some government corporation. In effect, the United States government is becoming a huge investment bank.

4. The passing of the ideal conditions for strong investment banking. Investment banking both encouraged and was the result of the formation of large-scale business and business combinations. As we shall see in Chapter 17, "big business" is not necessarily the most efficient. The trend toward combinations has met much opposition, though a considerable amount of it is still going on and will be discussed in the next two chapters.

The investment banker achieved his greatest prominence toward the end of the nineteenth century and in the early part of the twentieth when investment funds were scarce and widely scattered, when companies did comparatively little internal financing, and when a highly dynamic and ambitious business leadership was eager to lay its hands on funds on short notice. The investment banker stepped into the scene by undertaking to guarantee the ability of a business to raise needed funds with speed and certainty.

* See "G.M. Sells Direct," *Business Week,* August 24. 1946.

5. The shrinking place of the investment banker in international finance. Foreign loans have in the past represented one of the most important activities of the investment banker, but governments seem to have assumed the leadership in this field. Such official action comes either by governments themselves or cooperatively through some form of international organization, such as the World Bank or a United Nations program.

6. The sad experiences of investors with many investment bankers during the 1920's and early 1930's. Investors tend to forget the numerous honest and conscientious investment bankers, but they remember the Insulls and the Kreugers. Charges which have been made against investment bankers include:

a. They failed to "follow up" the securities which they had sold and to render the service which the average investor thought had been promised. "Advice" was often biased. Theoretically investment bankers have a dual responsibility: first, to the company, and second, to the purchaser of the securities.* Actually, they often showed no concern for either side. Of course, from the legal point of view, investment bankers are vendors, not guarantors, of the securities they sell. In many cases, however, they made promises which could not possibly be fulfilled. They often made incomplete or inadequate statements in their prospectuses, protecting themselves legally by the qualification that, though they believed the data correct, they did not guarantee the accuracy.

b. They sometimes induced companies and governments to issue new securities, even when there was no need for extra funds, merely in order to originate securities to be offered to the public. Frequently these funds were, in the case of governments, for instance, used to finance "improvements" which often developed into "white elephants." † Instead of investment banking serving business, business sometimes served investment banking.

c. Frequently investment bankers sought and obtained representation on boards of directors of companies to whom they had advanced funds as a price of their financial aid. This practice

* See testimony of Penn Harvey of the Chase-Harris-Forbes Company, in *Hearings* before Senate Committee on Banking and Currency on S 875, Seventy Third Congress, 1st Session, p. 301.

† This was the case with a number of our Latin American loans. See Max Winkler, *Foreign Bonds—An Autopsy*, Roland Swain Company, 1933, Chs. 1, 2.

often created bad will, particularly when business painfully learned that investment bankers were not paragons of wisdom, even in corporation management. Then, also, it became widely recognized that if a company's management could not be trusted to carry on its business, its securities probably should not have been issued and sold to the investing public in the first place.

There are certain conditions, however, which tend to favor the return of the investment banker to a position of great importance. A considerable number of American companies will be forced to raise huge quantities of capital during the next few years. We have already seen that business fell behind in its fixed asset purchases and replacements during the war. A research study sponsored by the Committee for Economic Development concludes that the fixed assets of companies will have to be increased by some $50,000,000,000 in the postwar transition.* Moreover many companies failed to invest their depreciation and obsolescence reserves adequately. But this is not all: they will need new and more modern and efficient equipment, both to meet the demands for high wages or to displace labor and to hold their own in competition for markets.† It has also been said that "depreciation reserves that seemed adequate on the low-cost basis of the 1930's are not now likely to prove sufficient for the needs." ‡

When companies do not use their depreciation reserves to replace their fixed assets, they really have sold some of these assets. The periodic allowance for the reserve has probably by and large been included in the price of the product. Theoretically, this should mean that the companies have adequate liquid assets with which to restore the fixed equipment. While this liquidity seems to be characteristic of great portions of our business, it is not true for all. Many companies will be forced to augment or change the make-up

* Charles C. Abbott, *op. cit.*, p. 51.

† A recent study by the Twentieth Century Fund estimates that "with high level activity" the annual demand for capital goods may amount to $28,000,000,000 by 1950 and to $33,000,000,000 by 1960, about $18,000,000,000 of this in 1950 being for productive facilities, something over $7,000,000,000 for housing, and about $2,500,000,000 for developmental projects such as highway construction and conservation. The emphasis on the shorter working week, which may fall from 43 hours in 1940 to less than 41 hours in 1950, will necessitate an increased use of machinery and equipment. *America's Needs and Resources*, Twentieth Century Fund, 1947.

‡ Willard E. Atkins, George W. Edwards, and Harold G. Moulton, *The Regulation of the Security Markets*, The Brookings Institution, 1946, p. 13.

of their current assets. The increased merchandise turnover during the war; the sale of goods to a quick-paying customer, Uncle Sam; the curtailment of credit sales, and the shortening of the collection period; the improvements of the marketing processes; the reduction both in the number of items and in the total stock carried on the shelves of business—all these meant that during the war companies did not require as many current assets per dollar of sales as are needed in peacetime economy.

The war over, we will return in greater or lesser degree to some of our old habits and customs, such as greater installment sales, longer collection periods, greater total stocks and variety of items on shelves, and the restoration of many services outlawed during the emergency. Business is also anticipating a greatly increased total activity at a higher-than-prewar price level. All these forces will increase the need for additional current assets. The study of the Committee for Economic Development just referred to estimates that possibly $15,000,000,000 of additional current assets will be needed by American business during the transition after the war. New businesses, it also concludes, will probably require some $3,000,000,000 per year. These needs will be satisfied mainly by bank loans, by advances from the federal government, by the development of new government-sponsored lending agencies, by internal financing, and by the sale of stocks and bonds. Bank loans are on the upgrade and will continue to increase, but it is doubtful if they can be relied on to finance the required expansion of fixed assets or additions to current assets. Instead of financing business generally, the government and special new government-sponsored lending institutions will function to aid special enterprises or types of activity, such as small business or industry close to the public interest.

The amount of internal financing will continue large, but it will probably not be adequate for the present purpose because of the great deficiency in past investment and the tremendous need for modern equipment. Moreover, there will be much opposition on the part of the politicians, labor leaders, and stockholders to the building up of large surpluses.* Therefore, in the absence of special

* Lewis H. Kimmel in *Depreciation Policy and Postwar Expansion,* The Brookings Institution, 1946, p. 50-53, suggests that corporations be allowed, for three or five years, to set up tax-free replacement reserves in addition to the suitable allowance for depreciation. This proposal, of course, runs counter to the present position of the federal tax authorities. Kimmel sees three arguments for a law of Congress permitting such special deductions: (1) if such

measures, a large part of the long-term financing must be external, mainly through the issuance of stocks and bonds. The studies of both the Committee for Economic Development and The Brookings Institution conclude that a great amount of new funds will be raised by our corporations in the general capital markets.* This undoubtedly will build up greatly the work of the investment banker.

Heavy inheritance and estate taxation may have a stimulating effect on the activities of the investment banker. Numerous closely held family businesses are owned by the "one-man corporation." The death of the chief owner will necessitate the fixing of the tax on the basis of the present prices of his stock. Since the government will neither take stock in payment of the tax, nor wait for its money until conditions for the sale are just "right," the law requires a special appraisal in which a strong-armed tax collector may want to set the value as high as possible. A fair appraisal is extremely difficult when there is no general market for the securities. Accordingly, it is argued by some that one of the fields for the investment banker is the flotation of securities for such companies on a wide public basis so as to create a market which can be used as a fair basis of evaluation.†

Summary. A corporation may raise money externally from individuals already connected with it in some way—from employees, from customers, and from the stockholders. External funds may also be raised through sale of securities either directly to others or through the medium of the investment banker and other financing institutions.

Employee ownership was once an important source of corporate funds. The bad feeling which arose when the securities fell in price, the danger of contingent liability in the case of stock sold to employees at a price below par, and the opposition of trade unions have been instrumental in causing the drying up of this investment channel.

Customer ownership developed especially in the public utility

reserves are not set up, a portion of capital may really be taxed as income; (2) during the war many companies could not make the normal replacements in anticipation of higher prices; (3) the present level of costs will not recede in the near future.

* See Atkins, Edwards, and Moulton, *op. cit.* pp. 41-43, and Abbott, *op. cit.*, p. 37. Abbott cites authority to the effect that, if we are to have a gross national product of $160,000,000,000, we can expect security flotations of $16,000,000,000 per year.

† Brochure on investment banking by Eastman, Dillon & Co., 1946, p. 12.

field, but certain difficulties were also encountered here. Purchasers of the preferred stock often considered it a fixed-charge security, and frequent failures to pay dividends antagonized the owners. Customer ownership tended to curb the corporation's freedom in calling and refunding the stock. Labor leaders also frowned upon this method of selling securities.

The sale of common stock or of voting and participating preferred shares brings us to the problem of the computation of the value of a right. This is complicated by the fact that if new stockholders are to come in on an equal basis with those already in the corporation, the old stockholders must give up their relative position and a part of their rights in the company. If the new stock is offered at a sufficiently high price to equal or exceed the present value of the stock, the old stockholders may lose nothing financially—in fact, they may gain—but they would find their relative position in the control lessened. As a matter of fact, in this case the rights would have no value. If, however, the company offers the new stock at a price below its present value, which should be the normal practice, it is, to the extent of this difference, giving a part of their equitable rights to the earnings and assets, as well as a share in the control, to someone else. If, now, the stockholder exercises this right himself, he reduces the value of his old shares but he makes up for such loss by getting a "bargain" on the new shares. If he sells his right to someone else, he finds the value of his old shares reduced, but he makes up this loss through the proceeds of the sale of the right. In either event he comes out even. If, however, he fails either to exercise his right or to sell it, he loses by his own negligence. This fact makes it extremely important that a corporation give adequate notice whenever it plans to sell additional stock to its stockholders.

Funds may also be raised through the regular investment channels, probably the investment banker. Investment bankers do not always perform the same functions. Sometimes one banker will specialize in the underwriting and at another time function as a mere distributor. Then again he may take an active part in bringing about a reorganization or a combination and in effecting the ensuing exchange of securities. The investment banker, at least temporarily, lost his position in the last two decades, such loss being due mainly to the emphasis upon internal financing, the large amount of direct placement of new securities, the increasing extension of government financing, the passing of the ideal conditions for strong

investment banking, and the bad experience of many investors with investment bankers.

Certain conditions, however, favor the return of the investment banker to a position of great importance. Many corporations will have to seek new external funds. Rising prices will tend to make the accumulated depreciation reserves inadequate to replace the depreciated assets. Companies will be eager to install more and better labor-saving machinery in order to cope with the prevailing high wage rates. Moreover, when the sellers' market has disappeared, business will render an increasing number of special services and will give more liberal credit terms and the choice among a greater variety of goods. To do this, companies will need additional funds. Politicians, labor leaders, and many pressure groups will oppose the building up of large surpluses by the ordinary corporation. Special tax laws, such as that placing a tax on the unjustifiable accumulation of surplus, may become increasingly important. Such trends and circumstances may force the ordinary corporation more frequently into the financial markets in search of funds.

We have now discussed internal and external financing and the functions of the investment banker. So far we have made reference to financing only in the ordinary course of business. Frequently, however, the capital requirements of a company may be affected by developments outside of the usual trend of events. Companies may, for instance, enter combinations of various kinds. In the promotion and expediting of these, the investment banker has found one of his chief functions. We now turn to a discussion of such forms of organization. Before considering the process of financing combinations, it will be appropriate to analyze their nature and the reasons for their formation.

PROBLEMS

1. What is the fundamental difference between internal and external financing?

2. According to a study by Irwin Friend in *Survey of Current Business* for March 1948 (p. 11), corporations other than banks and insurance companies in 1947 expended 14.5 billion dollars on plant and equipment and 7 billion on increasing their inventories. They added 5 billion to their trade receivables. This expansion was

financed by 10 billion of retained profits, 4.5 billion of depreciation charges, 4 billion of net new capital issues, 3.5 billion of bank loans and mortgages, 1 billion increase in trade debts, 3 billion increase in income tax liabilities and other payables, and a 500-million reduction in liquid assets.

a. Arrange these items in the form of an equation or a balance sheet showing the plus and minus items.
b. How did the amount of internal financing compare with the amount of external financing?
c. Consult the table showing new security issues (for all corporations) given in Appendix F and indicate approximately how many of the new capital issues were debts and how many were equities.

3. At the peak of the bull market in 1929 a financial writer made the statement that the employee stockholders in four companies had made the enormous profit of $242,000,000. This aggregate profit was stated to be comprised of $117,000,000 to 89,219 employees of the American Telegraph and Telephone Company; $91,000,000 to 49,201 employees of United States Steel Corporation; $21,000,000 to 118,000 employees of the Pennsylvania Railroad; and $13,000,000 to 40,000 employees of New York Central Railroad. (4 *Corporate Practice Review,* Vol. 4 (May 1932), p. 60.)

Are there any dangers involved in a situation such as this?

4. Extract from letter received by the main office from the manager of a local utility plant, on file with the Securities and Exchange Commission:

> When you go to collect a bill and the party brings out some stock to pay with, it keeps me nervous. I have been in some tough places myself, have been shot at some eight times. . . . I want to keep all the consumers friends of mine and the company's. . . .

a. To what kind of stock was this manager referring?
b. Though the measures threatened here are extreme, was the fundamental issue involved unusual?

5. A company had 20,000 shares of common stock outstanding, of a par value of $100 per share. Under the provisions of a charter which permitted them to do so, the directors decided to offer the stockholders the opportunity to subscribe for enough additional shares to make a total of 50,000. The subscription price was $150

per share, but the market price at the time was about $500. The stockholders were given six weeks in which to exercise their rights. Mr. H, the owner of 500 shares, lived in a distant land and received no notice of the rights, though the company tried in various ways to get in touch with him. Having received no response from Mr. H during the designated period, the company sold on the public market the shares that he would have got. Mr. H brings suit for damages against the company, arguing that he was injured by the lack of an opportunity to subscribe.

a. Approximately for what amount should Mr. H sue?
b. In deciding whether he should collect these damages, what questions would you ask?
c. If the shares of this corporation were widely held, what would you say as to the size of the R? (This is often also called N.)

6. A corporation has tangible assets of $12,000,000. On the liability side are current liabilities of $500,000; 6-percent bonds $1,000,000; 100,000 shares of common stock of a total par value of $5,000,000. The rest of the items are surplus or surplus reserves. What is the book value of a share of common stock? The net income after all costs, expenses, and all taxes, but before interest on the bonds, is $690,000. What is the rate of return on the total long-term investment? What are the earnings per share of common stock? The times interest earned?

The directors now give the old stockholders the right to subscribe for new stock at a price of $105, allowing them one new share for each old share held. The market price of the stock happens to be $125. What is the value of a right? If all the rights are exercised, what becomes the book value of a share of common stock?

Assume now that the rate of return on the total long-term investment next year is the same (that is, the same percentage) as it was in the first paragraph in this problem. What will be the times interest earned? The earnings per share of common stock?

Chapter 16

The Combination Movement—Forms and Causes

Combinations among companies may take the form of a more or less loose association or cooperative device, such as pools, cartels, the community of interest, and the tacit understanding that some influential company is to be the leader in the industry. Or the combination may consist of a proprietary relationship, such as the lease, the holding company, and the merger.

Associative versus proprietary form of combination. Some of these terms may require explanation. In the pool the individual companies turn some specified function over to a central agency. In phases of the business other than those so relinquished, the members maintain their separate independence. In a selling pool, for example, each company can probably produce as much as it wishes, but it agrees to sell only to or through the common agency. In an output pool each member agrees to limit its output according to some formula, but it can probably sell wherever and whenever it wishes. The cartel is a form of pool. It generally has the special blessing of government and is intended to set up a monopolistic front, often through a common sales agency, especially in the foreign market.

When members of a family or a banking group own the controlling interest in a number of corporations, or when an associated group of men become directors in the same companies, we have a community of interest. No formal agreement exists. No single individual necessarily owns a majority of the stock, though, of course, one of them may be dominant. The very looseness of the organization and the impossibility of compelling the carrying out of tacit understandings among men have tended to diminish the importance of the community of interest.

At the other extreme from these associative or cooperative types

are the proprietary combinations. Under these forms, control is obtained and exercised through actual ownership or legal authority over property or over stock. In the holding company, for illustration, one company owns the controlling interest in the subsidiaries. The directors of the subsidiaries are really selected by the holding company. Both the dominant company and the subsidiaries are legal entities maintaining their separate existence.

Where a holding corporation has obtained complete or 100-percent control of the stock of other companies, it may dissolve some or all of these acquired organizations, leaving sometimes only a single company as the surviving entity. If one of the old companies keeps alive to receive the others into it, the process and the results are technically referred to as a merger. If all the companies are swallowed by a new corporation established for that purpose, the process and the results are called an amalgamation. Frequently both forms are indiscriminately referred to as mergers. Sometimes the names of the absorbed companies are retained as "divisions" for advertising and good-will purposes, but these units no longer exist as separate companies.

The other form of proprietary relationship, the lease, is frequently found in the railroad industry. Both the lessor and the lessee must maintain their individual identities, but, if the entire premises are leased, the lessor is only a shell. Though the rental may be paid in cash, it frequently takes the form of the payment of a stipulated rate of dividend on the lessor company's stock and the guarantee of interest on its bonds.

In describing these various processes, economists do not agree on a uniform terminology. We shall use the word "combination" as a general term to refer to any or all of these devices or forms. We shall reserve the word "consolidation" for the close proprietary types, such as the lease, the holding company, the merger and amalgamation, and shall refer to the others—the informal conference, pool, cartel, community of interest—as an "association."

Horizontal versus vertical and circular. A combination may be said to be horizontal or vertical. By a horizontal combination is meant the grouping together, whether by association or by consolidation, of two or more companies which are engaged in predominantly the same kind of business. By the vertical is meant a combination of companies engaged in successive stages of production, perhaps backward all the way to the furnisher of raw materials or forward to the seller of the final product. This is also called "integration."

In the horizontal combination the various plants are usually geographically separate, there being little or no physical or direct operational connection between them. After the combination the different plants may go on more or less the same as before except that some of the facilities may be moved or abandoned.

The horizontal combination often standardizes sales prices, eliminates competition among formerly competing units, establishes general management and service personnel, develops joint systems of marketing, research, and advertising, and adopts common devices for purchasing raw materials or obtaining funds. A horizontal combination among electric utility operating plants may not directly affect the efficiency of each unit, but, if the plants are not too widely separated, transmission connections among them may result. This may facilitate the mutual use of all the facilities and also may average out the peak load, thus reducing the amount of uneconomic expansion of any one unit. The common use of better technical and research facilities may also increase the efficiency of the individual companies.

In the vertical combination the plants representing the successive stages may be widely separated geographically. If a holding company acquires control of a Minnesota iron-ore producer, of an Indiana coal company, of a steamship company and a railroad, of a blast furnace in Gary, a rolling mill in Chicago, a Toledo engine company, and a Detroit automobile assembly plant, this would constitute a vertical combination or integration. This sprawling growth, however, might not bring any improvement in technical efficiency over that of the individual independent units. Their scale of production might not be affected.

Another form of combination is that often called the circular. This refers to the bringing together of products which may be widely different but which may furnish diversification or which may be disposed of through the same marketing channels. General Mills, Incorporated, General Foods Corporation, and the International Harvester Company are illustrations. To refer to International Harvester, the same marketing outlet may handle twine, tractors, and milking machines.

Some combinations are neither vertical nor horizontal nor circular. They are merely hodgepodges or conglomerates, which seem to be the result of a groping desire to bring companies together. Many utility combinations were of this hit-and-miss nature, com-

panies in remote sections often being combined by some ambitious promoter with little or no economic justification. These conglomerates are also frequently found among industrial companies. Maytag Company recently acquired a producer of chicken brooders, and Universal Match Company bought up three candy manufacturers.

Combination and large-scale production. Thus combination is not necessarily synonymous with large-scale production. There can be small-scale production even in a large combination. The control of all shoeshine stands throughout the United States would comprise a sizable horizontal business, but it would hardly bring about large-scale production. The method of rendering this service would probably go on much as before. The combination may merely mean an enlarged scope of management and supervision instead of an increased scale of operation. Of course, the general management might develop new processes for shining shoes at decreased costs. The difficulties of control and supervision, however, might more than offset any technical advantages gained through combination.

It should also be obvious that there can be large-scale production even in a single-unit organization. An independent printing establishment may publish magazines and books on a tremendous scale even if it does contract work for others and has to purchase its raw materials from independent producers. Here there would be mass production without integration.

Causes of combination. The causes of or motives for the formation of combinations may be classified in four groups:

1. Those forces which facilitate or lubricate the process of organizing combinations (assuming the presence of a motive for combination).

2. Those forces which have as their primary purpose the direct increasing of the income either of the organization or of persons associated with it.

3. Those forces which represent an attempt to safeguard the independence and even the life of the participating organizations.

4. Those forces or motives which are intended to protect the social welfare.

1. *Those forces which facilitate or lubricate the process of organizing combination.* The development of the corporation itself as a form of business organization has facilitated the formation of combinations. It is difficult to imagine a sole proprietorship or a partnership getting control over many other sole proprietorships or

partnerships. The sheer difficulty, for instance, of joining one partnership with others, involving a great increase in the number of principal-and-agent relationships, to say nothing about the correspondingly greater danger from the unlimited liability feature and the increased probability of dissolution by death of a partner, should discourage any but the most stupid or the most indiscreet from attempting a large combination by means of the partnership.

The early general rule in the American states provided that, while a corporation could invest temporarily idle funds in the securities of another, it had no power to buy and hold stock in another corporation for purposes of control. Any extensive purchases for control would pull stockholders into the conduct and risks of business which they probably had not agreed to enter by the charter. In 1888 New Jersey passed a law permitting corporations to acquire and hold stock of another corporation for the purpose of control. This statute, followed by similar laws in other states, opened the way for the modern holding company. The holding company has facilitated the control of large amounts of property by means of comparatively small investment and thus has aided the combination process.*

The relative absence of internal trade barriers encouraged the development of wide markets throughout the United States and thus encouraged the growth of big business over wide areas. A policy of laissez-faire, which has meant little legislative and judicial interference, prepared the ground for combinations whenever other forces were present. Such laissez-faire attitude, as we shall see, was especially prevalent from the Civil War to the turn of the century and again to a lesser extent in the 1920's.

2. *Those forces which have as their primary purpose the direct increasing of the income either of the organization or of persons associated with it.* Any company in search of profits likes to increase the margin between its selling price and its costs and expenses. There are, of course, two fundamental ways of doing this: first, increasing the selling price or the volume of sales; second, lowering the costs and expenses. A company often attempts the first by eliminating competition. Since such elimination of competition by itself may seem brazen and antisocial and might be attacked under both the common law of conspiracy and the federal antitrust acts, promoters have frequently advanced the argument that the combina-

* For description of the process of pyramiding through holding companies, see Chapter 29.

tion they sponsor will bring about economies which will reduce the costs per unit of product.

Economies are internal and external. Economies of an internal nature may come merely from an increase in the total output. An increased output will lower the average unit cost of production through the mere fact that it is spread over the same fixed costs. But, more important, the increased scale of output may mean the use of better machines and more efficient processes and may encourage the more effective arrangement and control of the working force.

Assume that a business unit presents the following cost figures for various possible outputs at any one time.

Output	Fixed costs	Variable costs	Average variable costs	Total costs	Average unit cost
10,000......	$20,000	$10,000	$1.00	$ 30,000	$3.00
20,000......	20,000	18,000	.90	38,000	1.90
30,000......	20,000	25,000	.83	45,000	1.50
40,000......	20,000	35,000	.88	55,000	1.38
50,000......	20,000	53,000	1.06	73,000	1.46
60,000	20,000	82,000	1.37	102,000	1.70

In this illustration the average cost per unit changes with variations of output at any one time. This is mainly because the fixed costs, regardless of the output, remain theoretically at $20,000. The variable costs per unit, however, also change. At first this average of variable cost falls with increased output because of more effective utilization of man power and materials. At a very low output there may be a waste of materials, or workers who are hired for full time may not have enough to do to keep them completely occupied. With a larger output these points of inefficiency tend to be removed. Then, again, after a certain point has been reached the workers may be less efficient or there may be extra pay for overtime. Employees may then be crowded or working under less advantageous circumstances. Higher prices may have to be paid for additional materials. This will mean a rise in variable costs which will be reflected in increased total cost average per unit. If 50,000, in-

stead of 40,000, units are produced, the average total cost will be $1.46, rather than $1.38. If 60,000 units are produced, instead, the average costs will be $1.70. The point of lowest average cost is at $1.38, which is called the optimum.* We may refer to the reduced average unit costs which result from raising the output as constituting an internal economy.

Let us now assume that this plant is combined with another near-by company. If additional funds become available, the poorer equipment can be scrapped and better and more up-to-date machinery installed. If the plants can be physically connected, the productive processes might be rearranged and better records and controls introduced. The combined unit can now produce more. The cost figures for the combined establishment will probably be quite different than those which we just gave for the first company. The total fixed cost is larger, because the installation of more expensive or better equipment involves greater amounts of interest, depreciation, rentals, and property taxes and also larger total costs of supervision and management. Because of improved working conditions and controls and more efficient purchase and use of materials, average variable costs in relation to the total output may be somewhat smaller. If the scale of production goes beyond a certain point, these variable costs may, as before, rise. Let us assume the probable record of the new organization at various capacities at any one time to be as follows:

Output	Fixed costs	Variable costs	Average variable costs	Total costs	Average unit cost
30,000	$30,000	$22,500	$.75	$ 52,500	$1.75
40,000	30,000	27,000	.68	57,000	1.43
50,000 .	30,000	31,000	.62	61,000	1.22
60,000	30,000	37,000	.62	67,000	1.12
70,000	30,000	50,000	.71	80,000	1.14
80,000	30,000	71,000	.89	101,000	1.26

* Our table gives a discrete series of figures—that is, one with intervals between the classes. Mathematical economists prefer, of course, to place such cost figures in a continuous basis. See George Stigler, *Theory of Price*, Macmillan Co., 1946, Ch. 4; and Joan Robinson, *Economics of Imperfect Competition*, Macmillan Co. (London), 1933, Ch. 2.

The scale of operation of this combined unit is greater than that of the first. The company is more "efficient." * The new company can produce a greater output at a lower cost per unit. In other words, its output at the optimum is larger. These changes represent real internal economies.

External economies have to do mainly with the improvements in a company's bargaining position with outsiders. The combined organization might be able to buy raw materials and labor more economically than the original organization simply because it has a more strategic position than the old companies. Since these purchases involve relations with outsiders, such advantages in bargaining are properly grouped under the external economies. A large business unit may work out more advantageous terms in the selling of its finished product as well as in its purchasing. It may be able to secure capital, as well as labor and materials, at lower cost. These external economies are basically savings resulting from greater strength in dealing with others.

An external economy, as we have seen, may enable the combination to acquire even more funds at lower rates. This external economy, in turn, may permit the purchase of better machinery and the introduction of improved methods of production. Thus, external economies may lead to internal economies. External economies are often not real economies from the social point of view. They represent a gain to the strong at the expense of the weak. They constitute basically a mere transfer of a saving.

The efficiency argument has been overemphasized by advocates of combination. As we have just seen, external economies may not be economies at all from the broad social point of view. Likewise, the internal economies may not materialize. A company may be operating at the most efficient point or under the most effective scale of operation before it is drawn into a combination, whether vertical or horizontal. Large-scale or mass enterprise may flourish in a single-unit organization. In some industries small plants may operate at

* Whether this organization is more profitable than the other is a question which will involve also an analysis of the demand for the product. Any good promoter will, of course, bear in mind both the cost and market aspects of his proposed organization. If the company to be organized is engaged in an industry in which there is effective competition, the promoter will be more interested in the general demand for the product than in the demand for that of his specific enterprise If the industry is one in which competition is very limited, he will be especially interested in analyzing the demand for his own particular output.

the optimum even with a low output. In others the scale of operation at the most effective point may be very large. The combination of scattered plants already operating at the highest efficiency will accomplish little good. It may do harm. The combination of scattered plants not operating at the most efficient scale will not, in itself, raise the internal efficiency of any one plant. If the company is financially sound, any necessary increase in the operations could probably be accomplished through ordinary financing, whether external or internal, without recourse to combination.

Furthermore, even if the new corporation can produce a greater output at a lower cost per unit, it may not wish to do so. It may find, for example, that the nature of the demand is such that it can charge relatively more and make greater profits by producing fewer units even at a cost above the optimum. As a matter of fact, such has been the policy of many combinations which have found themselves in a position to control the output.

Promoters have sometimes attempted combinations merely as a way of increasing their income. Promoters are generally paid for their services and contributions in common stock or in options to buy stock of the new or enlarged organization. Such compensation is presumably for property received from the promoter and for services rendered by him. The payments, however, have often been so liberal that, while outwardly the emphasis has been placed upon other objectives of combination, the existence of promoter's profits has been an underlying cause of combination.*

3. *Those forces which represent an attempt to safeguard the independence and even the life of the participating organizations.*† One form of protection comes through diversification. No company wants to be completely dependent on only one product. It likes to "spread out." The trite classical illustration has been coal and ice, which in the old days formed an ideal seasonal combination. Gas and electricity early were furnished by the same company, not because of similar production and servicing processes, for they are quite different, but because at first the two were competitive rather than complementary. By controlling both gas and electricity the early utility company hoped to place itself in a less vulnerable competitive position.

* For further discussion of the functions and work of the promoter, see Chapter 27. Also see Chapter 17 for the promoter's profits in the case of the United States Steel Corporation.

† It is clear, of course, that all of these may be considered ways of increasing the income. The basic purpose of any business is to make profits.

The tendency to take over competing and substitute products has long been one of the dominant characteristics of the combination movement. The early entry of some of the automobile companies, such as General Motors, into airplane manufacturing either directly or through subsidiaries, and of railroads into bus transportation, furnishes illustrations of such diversification for protective purposes. General Motors also attempts to fortify itself against changes in general business by producing automobiles adapted to various-sized pocketbooks. Whisky companies have frequently taken over wineries, breweries, and soft drink producers. A tin-can manufacturer has purchased a fiber container and a paper cup company. Several automobile companies have also combined automobiles and refrigerators. Phonographs and radios are a well-known combination. General Foods Corporation produces both Maxwell House coffee, which may prevent sleep, and Sanka coffee, which may bring on sleep! Diversification has thus been one way of spreading business risk.

A fear that raw materials will not be available in adequate quantities may force a company to extend its control backward to include these sources. This expansion seems to be common during business booms and inflation, because during such times prices of many raw materials rises more rapidly than do the prices of the finished product. Newspaper and periodical publishers during scarcity or threat of inflation seek control over paper mills and over sources of pulp. This expansion, in turn, tends to force smaller publishing companies to extend their control backward so as to get control of paper supplies, or, if they are unable to do so, to sell out to more strategically located competitors.

"Forward integration," whereby a manufacturing company controls its marketing outlets, is likely to occur in industries whose products require regular servicing or special sales campaigns, or where the business is such as to require continuity from the manufacturing through the selling, or where the manufacturing company produces a wide variety of substantial products. The International Harvester Company, to which we have already referred, is an illustration of the last of these conditions. It produces such a variety of products that it finds it feasible or necessary to control its own distribution outlets, particularly since special sales campaigns or servicing may be needed for some of the items. The diverse output of this company, from twine to tractors, can easily keep a dealer fully occupied.

Strange forms of diversification are sometimes found.* In the "whisky crisis" of 1943 companies with short stocks of whisky were eager to obtain control over plants in possession of large inventories. When the income tax laws favored the practice, profitable companies often sought to buy up weak companies or companies losing money so as to average a lower net income. Lest the mixtures become too strange, the courts ruled that such combinations must have a semblance of reality and a common-sense business purpose.†

The textile industry furnishes an illustration of a growing trend toward integration. In the manufacture of cotton textiles the chief steps are spinning, weaving, converting, and cutting. The function of the converter has been to take the raw or "gray cloth" from the mills and to finish it into various "feels," colors, and patterns. The converter sells this finished cloth to the cutters, who make garments. Traditionally, the spinning and weaving have been integrated and carried on by the same company. Converters, who have often farmed out the finishing, and the garment makers have generally been separate enterprises. However, various companies in these three fields have recently been reaching forward or backward. Some have expanded in both directions. Shortly after World War II between one half and three quarters of the gray goods were being finished by the mills themselves, compared with only one fifth before the war. Because they could charge relatively more for the finished cloth than for the gray goods, mills began to do their own converting. To keep from being squeezed out by mills expanding forward, converters reached back to get control over mills. There is some tendency for the single company to cover all the processes up to the retailer. The organizers of Textron Inc., an example of this overall integration argue that, by controlling all the processes, it can maintain a more uniform standard of quality, can advertise by a brand name, can reduce costs by eliminating extra handling and

* Arthur Pound and Samuel Taylor Moore in *They Told Barron,* Harper & Bros., 1930, p. 324, tell this story:

"Edenborn, one of the rich men of this country . . . , told me that he and John W. Gates were once the only manufacturers of barbed wire. When Gates' plant was burning down, Gates actually had the audacity to go to Edenborn and propose a consolidation. Edenborn replied: 'Gates, your factory has burned. How dare you propose a consolidation?'

"Gates replied: 'That is just why I want a consolidation. You can now manufacture and I can sell.' I made the consolidation, for Gates was right. I could manufacture and he could sell."

† Maurice Austin, "Observations on Minimization of Excess Profits Taxes," *J. of Accountancy,* Vol. 77 (March 1944), pp. 209-10.

mark-ups, and, by being close to the retail end of the process, can help to even out the fluctuations and violent price swings that have characterized this industry.

On the other hand, many observers point out that converting and cutting are highly speculative phases which require a relatively small investment. Therefore, companies engaged in these can jump in and out of business readily. They point out that a large company engaged in all the successive processes, including the milling with its relatively large investment, may not be able to adjust its production to the highly uncertain demand for finished clothes and garments.*

Extension has often been made into financing the sale of the product. In the automobile industry the three most prominent manufacturers—General Motors, Ford, and Chrysler—either organized their own finance companies or made working agreements with finance organizations and then compelled or strongly urged their dealers to make use of the facilities of these companies. General Motors had its General Motors Acceptance Corporation, Ford organized its Universal Credit Company, and Chrysler made a working agreement with Commercial Credit Company. Dealers who did not use the services of the respective finance companies were penalized. It was estimated that these three finance organizations at their peak handled three quarters of the retail automobile credit sales in the United States. The use of such coercive measures was condemned under the Sherman Anti-Trust Act.†

A corporation may even enter into some form of combination to safeguard its very life or existence. Consider, for instance, the danger of cutthroat competition. A plant occupying an important position in its field reduces its selling price in order to command a greater share of the market and thus enable it to reduce its average unit cost of production. If this producer is one of the three or four dominating the industry, the others will lose part of their market. They will, in turn, be threatened with idle capacity and may be hard put to cover fixed costs. In all probability they will retaliate by cutting their prices so as to recover and probably even to increase their market. And in this way a bitter, desperate competition—cutthroat competition—is set in motion, which, if allowed to continue, may bankrupt all the parties. In order to stave off bankruptcy, these

* Facts as to the textile industry are taken from "Textile Industry Knits Itself," *Business Week*, May 18, 1946, pp. 68-72.

† *Competition and Monopoly in American Industry*, Monograph No. 21, Temporary National Economic Committee, 1941, p. 172.

ıew proprietors are likely to combine in some way, perhaps in a proprietary type of organization or perhaps through some system of "price leadership." *

The steel industry represents a case in point. A heavy investment—at least $60,000,000 before World War II, and now probably $100,000,000—is required for the construction of a single plant. High fixed charges, particularly interest and depreciation, always tempted a company to reduce its prices in order to sell more goods and operate at a higher capacity, but such action was sure to bring reprisals. The result was a system of "price leadership" by the largest competitor of the group—the United States Steel Corporation. The following testimony, given in 1936 by William A. Irvin, then president of the United States Steel Corporation, before a Senate Committee is revealing:

THE CHAIRMAN: You generally make the prices?

MR. IRVIN: Yes, sir; we generally make the prices unless some of the other members of the industry think that that price may be too high and they make the price.

THE CHAIRMAN: You lead off, then, with a price charged, either up or down, at Gary? Is that correct?

MR. IRVIN: Yes, sir.

. . . .

THE CHAIRMAN: Then the rest of them follow that?

MR. IRVIN: I think they do. That is, I say they generally do.†

Eugene Grace, president of the Bethlehem Steel Corporation, the closest rival of the United States Steel Corporation, testified in hearings before the Temporary National Economic Committee that his company closely followed the price policy of the United States Steel Corporation:

MR. FELLER: Your policy was to also announce prices as high as those which had been announced?

* Cutthroat competition is likely to occur especially where there are relatively few producers in a field, since in this case each can exercise a significant control over the total output in its industry. Each producer has a control over its own price which is said to be "administered." Cutthroat competition cannot generally take place under perfert competition, under which each individual producer is responsible for an insignificant proportion of the total output and can, therefore, increase his sales, if he wishes, without lowering his price. In general, the price under perfect competition is set by the "market" and not by any single producer. Competitive prices are, therefore, often called "market prices," as contrasted with "administered prices."

† *Hearings* before the Committee on Interstate Commerce, U. S. Senate, 74th Cong., 2d session, on S. 4055, p. 595.

MR. GRACE: That is right. It is very encouraging to find them doing that.

MR. FELLER: Then you follow them up and you follow them down?

MR. GRACE: I would follow them up in that instance.

MR. FELLER: Do you remember any instance in which you didn't follow them up?

MR. GRACE: No; and I certainly remember no instances when we didn't follow them down.*

H. L. Randall, the president of the Riverside Metal Company, which did barely 1.5 percent of the fabrication of nonferrous alloys, testified at the same hearings as follows:

MR. RANDALL: Of course, as Mr. Cox first stated, the industry is one of price leadership, and a small company like ours, making less than 1.5 percent of the total, we have to follow. . . .

MR. ARNOLD: When you say you have to follow, you don't mean anybody told you you had to follow?

MR. RANDALL: No, sir; I don't mean that at all.

MR. ARNOLD: But you have a feeling that something might happen if you didn't.

MR. RANDALL: I don't know what would happen.

MR. COX: You don't want to find out, do you? †

The railroad industry, an industry of high fixed costs, was particularly susceptible to cutthroat competition, because traffic will flow back and forth between two competing companies in response to even small changes in rates. Aggravating the situation is the fact that a common carrier cannot by its own decision reduce or discontinue its operations. The law requires it to serve the public and to maintain regular service. Furthermore, there is no satisfactory alternative use for railroad facilities, and the roadbed cannot be moved to a more profitable neighborhood. All these conditions tend to intensify the struggle for traffic. The unsteadiness of the situation under competition led ultimately to a realization by Congress and by our courts that the railroad industry is naturally monopolistic and that, though roads may serve the same territory, their rates

* *Hearings* before Temporary National Economic Committee, Part 19, p. 10,603.

† *Ibid.*, Part 5, pp. 2085-87. For many years Judge Elbert H. Gary was the leading figure in the United States Steel Corporation and in the steel industry. It is said that at the time of Judge Gary's death in 1927 some of the other producers "lay awake nights" worrying about what would happen to the price system in that industry.

must be the same and must be regulated by law in the interest both of the company and of the public.

The danger of cutthroat competition also helps to explain why we encourage monopolies—with adequate price and service regulation, of course—in the public utilities, such as electric power, gas, telegraph, telephone, and water. The sheer lack of physical space and outlets for competing companies has been another factor making for such monopolies. Frequently public convenience has encouraged the operation of several supplementary services, such as rail and truck, gas and electricity, telephone and telegraph, by the same organization.

In our policy in respect to commercial air transport we are distinguishing between cutthroat competition, which occurs when two routes parallel each other serving the same territory, and "beneficial competition," which occurs if a route only runs in the same general direction as another or furnishes the same connections with other carriers. We are attempting to encourage beneficial competition but to discourage cutthroat competition, though in the present early stage of the industry we hesitate to grant complete monopolies. Air transport companies must make heavy investments in equipment which depreciates and becomes obsolete very rapidly. Airplanes can carry only a small proportion of their weight in paying load.* Air transport companies are common carriers and cannot refuse to operate a plane merely because only a small percentage of its space is taken. Such companies are, therefore, subject to a strong urge to increase their paying load to capacity.

American agriculture has had an interesting development. Farmers have been numerous, independent and, until recently, quite unorganized. Bedeviled by high fixed charges † in the form of interest,

* John H. Frederick, in *Commercial Air Transportation,* Richard D. Irwin, Inc., 1942, p. 228, says: "The fundamental disadvantage of the plane is that it's a poor weight-carrier. To secure high speed, the commercial load must be kept within narrow limits, probably not to exceed 25 percent of the total loaded weight of the plane. Since the operating personnel cannot be reduced, the plane uses a larger number of employees in proportion to passengers and cargo capacity than do other carriers."

† The number of farms in the United States decreased from about 6,800,000 in 1935 to 5,900,000 in 1945, and the average size of farms increased during the same period from 155 acres to 195 acres. A typical Iowa farm in 1945 had 160 acres worth between \$100 and \$300 per acre, 25 to 30 cows, 10 brood sows. The required machinery cost \$10,000; farm buildings, including the home, \$20,000; working capital \$3000. Report to executives on "Better Farming, Better Markets," *Business Week,* November 2, 1946, pp. 61-65. The total investment in such a farm may easily reach \$65,000 to \$70,000.

maintenance, and property taxes, during periods of falling prices farmers have not been financially able to reduce their output. Instead they have tended to increase their output as prices of their products fell, in the hope that larger crops, even at lower prices, would give them more money with which to pay their debts. Many farmers have considered their occupation as a mode of living rather than as a business—a fact which has contributed to their reluctance to reduce output when their selling prices are moving downward. Moreover, natural conditions are such that the output of agricultural products cannot be as closely regulated as the output of industrial concerns. The result of all these factors has been an inelastic supply of farm products which did not respond substantially to changes in price.

These circumstances developed a peculiar form of destructive competition which aided in bringing about a terrific fall in farm prices after World War I and again from 1929 to 1932.* In addition, many of the items purchased by the farmer are produced under partially monopolistic conditions. The manufacturer reduced his output in many cases and thus prevented his prices from falling so rapidly. The reduction of factory operations was naturally accompanied by a curtailment in employment, a fact which still further reduced the demand for farm products. Thus, agriculture especially felt the shock of a falling general price level.

The solution adopted by Congress under the Agricultural Adjustment Act of 1933 and succeeding laws could be called loose combination under the auspices of the United States government. Under these measures the farmers retained their nominal independence, but through a system of benefits they were encouraged or compelled as a group to reduce their output. The government paid rentals for acreage kept out of cultivation, the money for such rentals at first coming out of the processing taxes and later, when these taxes were declared unconstitutional, out of the general fund. Auxiliary measures systematized the marketing. Congress thus applied to agriculture, a severely competitive industry, some of the principles of monopoly.

4. *Those forces or motives which are intended to protect the social welfare.* An important reason for combination, not given much atten-

* Other reasons for the decline were: the shrinking demand through changes in eating and clothing habits; the increasing use of synthetic products; the decline of foreign trade; and the effort of many countries to expand their own foreign markets for new materials through currency devaluation and other trade controls.

tion until quite recently, is conservation. Let us refer to oil and gas. The peculiar geological nature of these deposits has made competition among individual, closely located wells destructive of the natural source of supply. Surface properties belonging to competing individuals may have a common source of oil. Sinking a well into this pool will create a low pressure area in its vicinity and will cause the oil or gas in other sections to drain toward it. This fact has often forced operators to produce to the maximum in order to get ahead of the others. The excessive pumping by one may thus deplete the supply of all.

The remedy for such exploitation lies in legislation permitting and even compelling operators to enter into combinations and working agreements of various kinds.* Proration of output among the owners requires cooperation and assistance from the state. Even such cooperation may not prevent undue expansion of output since the exploitation process is highly competitive. The chances in scientific drilling are said to be 6 or 7 to 1 against success, but in wildcatting they are as high as 20 to 1.† The discovery of oil deposits is unplanned and unregulated, but it sometimes is highly profitable, as witnessed by the recent great strikes in Oklahoma, California, Texas, and Illinois. One of the great conservation problems is the control over newly discovered deposits.

Natural resources tend to be wasted in other ways. Companies *A* and *B* own coal lands, some of which are supramarginal, others marginal or even submarginal at current prices. Each company will tend to exploit its best land to the fullest, leaving the poorer sources until a later date. It would be too much to expect one of these companies to exploit its poorest land while the other exploits its best. The better resources thus tend to be used up first. Society might be benefited by a more even exploitation of both the inferior and superior deposits. Encouragement of combination among these companies, with appropriate deductions for losses in the computation of income taxes and with appropriate regulation in the interest of the consumer, would bring society its supply of coal and at the same time should prevent the premature exploitation of the better resources.

The desire for or need of presenting a solid front in collective bar-

* See "Conservation of Our Oil and Gas Resources" by J. C. Hunter in Leonard M. Fanning (ed.), *Our Oil Resources,* McGraw-Hill Book Co., 1945, Ch. 3.

† *Competition and Monopoly in American Industry,* Monograph No. 21, *op. cit.,* pp. 26-27.

gaining has furnished business an important impetus for combination. By far the greatest amount of our business activity is carried on by the corporation, which is really a combination of stockholders. The corporation or even the combination of corporations bargain collectively through specially selected and trained officers who need not be stockholders. The labor union attempts to do the very same thing for the workers and today one of the primary social purposes of a labor organization is to meet group action with group action. By this device the workers act through their elected union officials who are generally not actual employees of the company. This process thus causes and permits the one group to bargain with the other group.

If an individual worker among 1000 unorganized employees loses his job unfairly, he loses the fraction, $1/1$, but the company loses only $1/1000$ of its staff. If the workers are organized, they could exercise group action through negotiation and perhaps by a strike so that the employer would also lose $1/1$ ($1000/1000$). Associations of employers rise, in turn, to present a more solid front to the union.

Labor organizations have been greatly encouraged and strengthened by recent federal legislation, particularly the National Labor Relations Act, under which employees are guaranteed the right to bargain collectively. After more than a century of social as well as legal opposition, this special attention has tended to make some labor organizations unduly aggressive and arrogant. Progress, however, is made by a series of extremes, and the next step was naturally the passage of legislation to curb and regulate union practices and to protect the employer and the general public. This was the announced purpose of the Taft-Hartley Act of 1947.

[Problems will be found at the end of Chapter 18.]

Chapter 17

The Combination Movement—Trends

Combination periods in the United States. There have been four periods of combination in the United States: (1) from the Civil War to 1893; (2) from 1897 to 1904; (3) from 1920 to 1929; and (4) during and after World War II.

1. *From the Civil War to 1893.* The thirty years following the Civil War, up to the summer of 1896, was in general a period of falling prices. During such a time the margin of profit in many businesses tends to narrow because the price received for the finished product often falls more rapidly than do many of the costs, particularly those that are of a fixed nature.This meant keen competition among businesses, frequently cutthroat in nature. As is often the case, the most desperate competition came from, or occurred among, the less stable and less profitable companies.

As a device for obtaining unity of action, companies at first turned to the pool. Joint control of output, the division of the market, the use of common sales agencies were the most frequent forms. As a general rule, however, pools did not prove satisfactory from the businessman's point of view. They were loose in nature, and their legal status was so uncertain that the agreements could not be enforced against any members who refused to live up to the terms.

Industrial leaders then turned to the trust. In the formation of the oil trust, first organized in 1879 but more accurately given the date of 1882, the principal (in some cases all) stockholders in some forty companies (the number grew to more than eighty) turned their stock over to a board of nine trustees, who received the right to vote such stock. The original holders or "beneficiaries" were given trust certificates, which, of course, carried the right to any dividends paid on the stock less any expenses of the trust. Though the nine trustees, including John D. Rockefeller and John D. Archbold, owned the majority of the shares turned in, the arrangement made for a com-

pactness and unanimity of control not otherwise attained by the stockholders. More or less similar organizations were soon worked out in the whisky, sugar, and several other industries. The trust device, however, was declared illegal by the courts.*

The desire to eliminate competition was only one of the motives for combination during this period. Another reason lay in the groping for the most efficient size of the operating unit. Professor Hoagland † points out that the leaders in the concentration trend of this period were operating executives, not financiers. They were mainly interested in the economies of large-scale operation or in the elimination of competition. Andrew Carnegie, who had built up the Carnegie Steel Company, itself a combination but later to be taken into the United States Steel empire, was an operating genius and not primarily a banker or promoter. Similar statements may be made about leaders in other early combinations.

2. *From 1897 to 1904.* Professor Myron W. Watkins has demonstrated that for a decade or more, or in some cases even up to the present time, the size and rate of output of many individual plants did not increase over what they were at the turn of the century. ‡ If this is true, why did even greater combinations follow after the first period? The answer lies in the change of the predominant motives. Financiers and professional promoters entered the picture. They did not place primary emphasis upon operating efficiency; they were more interested in "strategic advantage" and financial gain. New Jersey, it will be recalled, had in 1888 passed a law permitting the incorporation of companies for the purpose of holding stock in other companies. The fact that the holding company device permits a person with a comparatively small investment to control a relatively large amount of property served as an inducement to promoters to organize such companies.

* In *People* v. *North River Sugar Refining Company* (1890), 121 N. Y. 587, 24 N.E. 834, and in *State of Ohio* v. *Standard Oil Company of Ohio* (1892), 49 Ohio State 137, 30 N.E. 279, 15 L R A 145, the respective state courts held that the stockholders of the company, by surrendering their stock in exchange for trust certificates, acted contrary to the charter of the corporation. Therefore this act, which was really one by the corporation, was *ultra vires.* In the Standard Oil case the Supreme Court of Ohio based its decision also upon the fact that the trust created a monopoly contrary to the common law.

† Henry E. Hoagland, *Corporation Finance,* McGraw-Hill Book Co., 1938, pp. 396-97.

‡ From statement prepared by Professor Watkins for the Temporary National Economic Committee, March 1940, found in Monograph No. 13, pp. 133-39.

The new motivation—strategic advantage and financial gain—can be illustrated by referring briefly to the organization of the United States Steel Corporation. In the late nineteenth century a "primary" group in the steel industry—the Carnegie Steel, Federal Steel, and National Steel companies—dominated the production of crude and semifinished steel. A "secondary" group—American Steel & Wire, American Tin Plate, American Steel Hoop, American Sheet Steel, National Tube, and American Bridge—manufactured the lighter finished products. As reported by the United States Commissioner of Corporations: "The secondary group was dependent on the primary group for its crude steel; the primary group was dependent on the secondary for a market." None of the companies was self-sufficient.

After the secondary group had begun to extend backward into iron mines and crude steel plants, the primary group started to reach forward into the manufacturing of finished products, and to push still further back in the chain of production. In 1896 Carnegie Steel agreed to buy from the Lake Superior Consolidated Mines Company a considerable portion of its iron-ore requirements. At the other end of the process Carnegie threatened to go into the manufacture of steel tubes and other finished steel products. This threat by Carnegie soon became the "spark that lighted the train." The companies got together in self-defense. The ultimate result of all these processes of expansion, both forward and backward, was the organization in 1901 of the United States Steel Corporation which brought all the companies in both groups into one vast industrial empire.

The promoters and organizers of the United States Steel Corporation spent on this project about $28,000,000, most of which was contributed to the company in cash. As compensation, they were given preferred and common shares of the corporation, the amount being a little more than one eighth of the total stock issued at the time. They later sold these shares for more than $90,500,000, thus reaping a gross profit of some $62,500,000.* The proportion of the total stock received by the promoters came to only slightly more than the usual amount in other industrial combinations, a common figure being

* Eliot Jones, *The Trust Problem in the United States,* Macmillan Co., 1921, p. 288. In Chapter XII Jones gives a full discussion of the amount of promoter's profits and their influence on the organization of various early corporations.

about 10 percent. The stockholders of the constituent companies were given securities of the United States Steel Corporation, usually common and preferred stock (though Andrew Carnegie received bonds), in exchange for their original holdings. The stock of the United States Steel Corporation was mostly water at the time, but it was gradually squeezed out, enabling these exchanging holders also to make a profit, the amount of which depended on the length of time they held the securites so received.

Another motive during this period was the desire for economies, but the economies sought were to a large extent tactical. Many companies were concerned with strengthening their bargaining position with labor and with the providers of capital. Others were concerned with diversification of product, particularly with securing control of the various steps in the productive process. It will be recalled that one of the impelling reasons for the organization of the United States Steel Corporation was the fear that one or more of the companies would attempt to close the others out from raw materials or from the market.

The election in 1896 and 1900 of a national administration favorable to big business gave a further stimulus to the combination movement. The period 1899 to 1901 saw the organization of at least 200 industrial combinations with a total capitalization of $10,000-000,000.*

The Theodore Roosevelt big stick, however, helped to put a temporary end to the "era of big things." Many combinations proved to be mere promoters' dreams. Investors, politicians, and the public reacted against combinations. From 1904 to 1916 there were very few new combinations. While some organizations were promoted during the period immediately preceding our entry into World War I, the combination movement did not receive a renewed impetus until toward the end of the war and after its close.

3. *From 1920 to 1929.*† The Liberty and Victory bond campaigns of World War I had made the general public security-conscious. Our savings were large. We wanted securities, particularly common stock, and the promoters wanted to feed them to us. Business, in planning for the new era, wanted new money. We appeared in many

* Theodore N. Beckman, "Large Versus Small Business After the War," *American Economic Review*, Papers and Proceedings, Vol. XXXIV (March 1944), p. 98.

† For convenience the limits of this period are set here at 1920 to 1929. Considerable combination, however, took place between 1917 and 1920.

instances to have reached the limit of exploitation of resources, and promoters resorted either to combinations in hitherto relatively untouched fields or to the joining together or rearrangement of those already in existence.

The national administration had again become not only tolerant of but sympathetic with combinations. During the 1920's we worshiped at the shrine of "bigness." Bigness became synonymous with efficiency. Swelling became confused with growth. Merchandising, automobiles, motion pictures, radio, equipment manufacturing, newspapers, and public utilities heeded the enchanting call. The Transportation Act of 1920 attempted to promote consolidations among railroads. The Webb-Pomerene Act of 1918 permitted companies to organize export associations in order that they might put up a stronger front against foreign competition where the cartel was flourishing. In domestic business, promoters and financiers figured that combinations with large resources could do superior legislative lobbying. Their membership could also collaborate in fixing prices. Moreover, such organizations could cope better with the demands of an increasingly aggressive labor leadership.

One of the most common motives in this postwar combination movement among the industrial companies was the acquiring of advantages in selling and distribution. The result was often mere conglomerate aggregations. In the soap industry, the Colgate-Palmolive-Peet merger, for example, brought little if any change in the scale of production or in the processes of production. The elimination of unneeded salesmen, the better use of advertising, the economy in storage facilities, and the common use of trade names and trademarks were the important motives in the formation of this consolidation.*

It was during this period that the holding company reached the peak of its growth, being especially highly developed in the electric utilities.

4. *During and after World War II.* After an abortive tendency toward combination during 1933-35, activated largely by the codes of fair competition under the ill-fated National Industrial Recovery Act, a fourth period of combinations was brought into being by World War II. The government tended to favor the making of contracts with large companies because large units were more "re-

* See Myron W. Watkins in Temporary National Economic Committee Monograph No. 13, p. 136.

sponsible," could be more easily contacted, were in possession of functioning administrative machinery for reaching all subcontracting units, and generally were considered to have the "know how." Many small companies lacking remunerative war contracts became a "good buy" for other large corporations. During the war the government's policy was to curtail private building and many other enterprises in which the small business unit was dominant. Unable to secure rationed materials, many of these enterprises were forced out of existence.

High corporate income and excess-profits taxes also tended in some instances to encourage the formation of combinations. The use of the merger or the holding company device to bring together one company earning a large net income and another suffering a loss reduced the income of the two and thus could pull the combination into a lower tax bracket.* The merger device, however, tended not only to encourage the combination of companies having large incomes with those having losses, but made it advantageous in some instances to merge a profitable company with others also having net incomes. The merger in such cases might reduce the liability under the excess-profits tax by an increase in the total credit or exemption.

A discussion of the excess profits tax, in force during the war but repealed in 1945, would lead us far astray from our present purpose. We shall, however, illustrate the basic principles. Under this tax, each corporation was allowed a flat credit or exemption of $5000 *in addition to* whichever of the following alternatives the company saw fit to choose: (1) 95 percent of its average annual net income during the period 1936 to 1939, *or* (2) 8 percent of its invested capital during the tax year.† The taxable income was subjected to high progressive tax rates.

* For a time the use of the consolidated return—that is, the combined return for companies brought together through the holding company—was not generally permitted for income and excess-profits tax reports. Later, however, companies were permitted to file consolidated returns for the normal, surtax, or excess-profits taxes. The use of such returns, however, makes the taxpayer liable for an increase of 2 percent in the tax.

† The complexities of the tax stemmed mainly from the computation of these exemptions or credits. The concept of "invested capital," for instance, was very difficult to interpret. The rates allowed on the invested capital were generally graduated, the 8 percent mentioned in the text being used for computation on the first $5,000,000. The law was amended several times during the war period.

We have the following facts for Corporations *A* and *B:*

	Corporation *A*	Corporation *B*
Net income, 1942	$ 200,000	$ 20,000
Invested capital, 1942	1,000,000	1,000,000
Average annual net income 1936-39	80,000	25,000
Credit on basis of 95 percent of average 1936-39 income	76,000	23,750
Credit on basis of 8 percent of invested capital	80,000	80,000
Corporation takes invested-capital credit	80,000	80,000
Flat credit	5,000	5,000
Taxable income (net income of 1942 minus credits)	115,000	None

If these companies had been merged and operating as one unit, the figures could have been as follows, assuming the income of the consolidation to be equal to the sum of that of the two constituent companies:

Net income, 1942	$ 220,000
Invested capital, 1942	2,000,000
Credit on basis of earnings	99,750
Credit on basis of 8 percent of invested capital	160,000
Flat credit	5,000
Total credit (corporation takes invested-capital credit)	165,000
Taxable income	55,000

The table * on the following page shows the number of wage earners and value of the product for manufacturing firms in January 1943 expressed in percentages of the January 1941 figures.

It will be noted that employment by the larger firms increased by 62 percent and the value of their product rose 96 percent, while the smaller companies showed only small increases. The trend in favor of the larger companies is particularly evident in the metals industries. Statistics of employment from 1939 to 1943 show that the number of workers in plants having more than 500 workers increased by 175 percent while the employment in plants with fewer than 500 increased by only 25 percent.

*** Source of table and related figures is Howard R. Bowen, "Trends in the Business Population,"** ***Survey of Current Business,*** **March 1944, pp. 8-13.**

Group	All firms		Firms employing 125 or less		Firms employing 126 or more	
	Number of wage earners	Value of product	Number of wage earners	Value of product	Number of wage earners	Value of product
Metal..	183	204	109	125	198	220
Textile, clothing, leather......	105	144	100	117	107	157
Food.. .	119	165	85	114	148	209
Other manufacturers. . . .	129	135	99	105	146	152
All included manufacturers.	144	172	101	116	162	196

The combination movement has continued into the postwar period and is accelerating. More than 1800 manufacturing and mining concerns—mostly small—were purchased or merged by a comparatively few larger companies during the period 1940-46. About one third of these acquired companies were taken over by companies with assets of more than $50,000,000 and about two fifths by companies with assets ranging from $5,000,000 to $49,000,000. This means that almost three fourths of the acquired companies were bought up by organizations already possessing assets of more than $5,000,000. Some 453 companies, or about one quarter of the total, were acquired by 120 of the top 200 corporations in the United States.

Reasons for the recent trend. The chief motives for the more recent combinations may be classified as follows:

1. The desire to eliminate competition and to attain independence and diversification; and

2. The desire to escape the effects of the income- and estate-tax laws.

1. *The desire to eliminate competition and to attain independence and diversification.* The direction and forms of these recent combinations, together with explanation of the motive of diversification and independence, are best summarized by quoting from a report to Congress made in 1947 by the Federal Trade Commission on the basis of data gathered by the Department of Commerce:

How has the recent merger movement affected the competitive structure of the American economy? The majority of the actions (60 percent) have been horizontal acquisitions; that is, the purchase of firms engaged in roughly similar lines of production. Vertical acquisitions, which involve either the "backward" purchase of suppliers or the "forward" purchase of further fabricating facilities, have accounted for 17 percent of the total number. And conglomerate acquisitions, in which there is no discernible relationship in the nature of business between the purchasing and the acquired firms, represented 22 percent of the total number.

Each of these three types of acquisitions contributes to the increase of economic concentration and to the decline of competition. A major result of horizontal acquisition is to bring together firms producing (1) identical products for similar markets or (2) products which might be substituted for one another. For example in February 1946, Celanese Corp. of America, third largest producer of synthetic fibers in the United States, merged with Tubize Rayon Corporation, the eighth largest synthetic fiber producer. Continental Can Co., second largest factor in the tin-can field, in 1944 took over the Owens-Illinois Can Co. from Owens-Illinois Glass Co., one of the leading producers of glass bottles. Continental also bought up a producer of fiber cans. Obviously, many horizontal acquisitions have been instigated by the desire of large concerns to eliminate troublesome competitors producing a similar line of goods.

Vertical integrations have a particularly severe effect upon small business during periods such as the present which are plagued by shortages of raw materials, components, etc. During such periods, large firms frequently reach backward to acquire important suppliers, and in so doing reduce the amount of supplies available for small independent business. For example, during the war Safeway Stores, Inc., the country's second largest grocery chain, not only absorbed other grocery chains, but also reached backward into the manufacturing field itself and purchased 12 independent meat packers, a gelatin-dessert manufacturer, a biscuit and cracker factory, a butter plant, and a cheese-processing company. Similarly, many large firms find it advantageous to acquire further fabricating and finishing facilities in order to secure the higher-profit margins which are generally characteristic of the more highly fabricated products. What makes these higher-profit margins particularly enticing to big business at the present time is the probable continued existence of a sellers' market for many fabricated products. As an example of forward vertical acquisitions, International Paper Co., world's largest paper company, in 1940 bought out its largest customer for kraft board, Agar Manufacturing Co., and thus expanded into the shipping-container business.

The third avenue of expansion, the conglomerate acquisition, contributes greatly to the concentration of economic power, since it results in the absorption of many small firms in different and often completely unre-

lated lines of activity. Examples of conglomerate acquisitions are provided by the recent activities of Maytag Washing Machine Co., in buying into a producer of chicken brooders; of American Type Founders, Inc., a manufacturer of printers' type and printing machines, in purchasing manufacturers of high-fidelity radio sets and chromium and plastic furniture; and of Detrola Corp., a producer of radios and radio parts, in merging with International Machine Tool Co., a manufacturer of machine tools and parts, to form the International Detrola Corporation.

The traditional rationalizations for mergers are less applicable to this type of acquisition of firms in completely dissimilar and unrelated fields than to the horizontal and vertical types because of the great difficulty in obtaining thereby any important efficiencies of production and distribution.

Perhaps the most important danger which is inherent in these conglomerate organizations is the economic power which they can wield over a large number of different industries. Threatened with competition in any one of its fields of enterprise, the conglomerate corporation may sell below cost or may use other unfair methods in that field, absorbing its losses through excessive profits made in its other lines of activity, all rationalized in the name of "meeting competition." The conglomerate corporation is thus in a postion to strike out with great force against small business in a variety of different industries. There are few greater dangers to small business today than the continued growth of the conglomerate corporations.

2. *The desire to escape the effects of the income- and estate-tax laws.* One prominent and highly regarded financial authority concludes that in regard to the federal income tax laws:

On a straight arithmetic basis the owners of the [small] business find themselves better off to sell out, pay the capital gains tax on any increment in value, and put the money in diversified investments and trust funds, than they are to continue in business with the usual risks and responsibilities.*

In regard to the estate taxes this same authority says:

With a proprietorship or partnership, death of one of the principals may mean taking out a large sum of money to pay taxes, thereby wrecking the business. With a corporation it may mean forced liquidation of a substantial block of stock and in the case of small corporations there is often little or no market for such stock. For these reasons, owners of small business who are getting along in years frequently find a strong inducement to sell out their holdings, either for cash or for readily market-

* National City Bank of New York, "Monthly Letter on Economic Conditions, Government Finance," June 1947, p. 68.

able securities. As for the point that they sell to other companies and promote monopoly, the obvious fact is that there is very seldom opportunity to sell a small or medium-sized concern except to another concern in the same or a related line.*

The Federal Trade Commission, in its report to Congress already referred to, cites the current interpretation of our antitrust laws as the chief circumstance facilitating the present trend toward mergers and acquisitions.

Section 7 of the Clayton Anti-Trust Act of 1914, which in this respect was intended to implement the Sherman Anti-Trust Act of 1890, specifically prohibits one company from acquiring the shares of another corporation "where the effect of such acquisition may be to lessen competition between the corporation whose stock is so acquired and the corporation making the acquisition." The Act (Section 11) gives the Federal Trade Commission the power and duty, subject to review by the courts, to order any company violating this provision to divest itself of any stock so held contrary to the law. These restrictions apply, of course, only to interstate commerce.

In the enforcement of these provisions the Federal Trade Commission has run up against a serious stumbling block. A company acquires the stock of another competing company. The Commission brings suit against the acquiring company. While the suit is pending, the acquiring company quietly dissolves the acquired company and takes over its assets outright through a merger. This futile chase has left the Commission powerless, since the law according to the interpretation of it by the United States Supreme Court,† prohibits the acquisition and holding of such stock, but it does not specifically forbid the acquisition of the assets of a competing company. For some years legislation has been pending to plug up this loophole by revising Section 7 of the Clayton Act so as to prohibit mergers with, as well as the acquisition of the stock control over, companies when the effect might be substantially to reduce competition in interstate commerce. ‡

* *Ibid.*

† In several decisions, but see especially *Arrow-Hart and Hegeman Electric Co.* v. *Federal Trade Commission* (1934), 291 U. S. 587.

‡ Report of the Federal Trade Commission on "The Present Trend of Corporate Mergers and Acquisitions," presented to Congress, March 7, 1947. A news release of the Department of Commerce, June 25, 1946, gives statistics as to companies acquired or merged from 1919 to 1946. The facts in our discussion as to the 1800 companies merged since 1940 have been taken from the report of the Federal Trade Commission.

An important factor contributing to the continued trend toward concentration after World War II is the methods and policy of the government in disposing of surplus war plants. Billions of dollars worth of such assets have been sold to companies which were already large or even dominant in their field. The irony of the situation is that small companies could not pay for, or even economically utilize, most of these plants, which are frequently valued at many millions. It is worth noting, however, that very few of these surplus assets went to the Aluminum Company of America. The government's policy in this respect thus substantially limited the monopoly of that company.*

Place of small business. What is the future of small business? This question concerns all of us, though few would completely agree as to the exact nature of a small business. Some have considered small business as one in which the owners or proprietors have intimate and effective control of the management. Such a definition has value and interest, but it does not permit statistical measurement. Even a definition in quantitative terms has limitations. A retail store with 500 employees would be a large establishment, for example, but a steel mill hiring that number of workers would be considered small. For general purposes small business has often been defined as one hiring less than 250 workers † or owning less than $250,000 of assets or having a gross income of less than $1,000,000.

The statistics of small business have shown considerable fluctuation. A Department of Commerce study found that the smallest 75 percent of the corporations (that is, generally speaking, in the analysis those with an income of less than $10,000 and assets of less than $250,000) produced in 1932 only 2.71 percent of the total corporate income, compared with 6.03 percent in 1918. After 1932 the proportion produced by these smallest 75 percent of the corporations began to rise, being 3.7 percent in 1934 and 3.4 percent in 1939. ‡

Conditions favoring small business. Though the proportion of our total corporate income earned by small corporations seems unmistakably to have been downward during the period between the wars

* See paper by Harrison F. Houghton, "The Growth of Big Business," at session of the American Economic Association, December 29, 1947, to be published in *Papers and Proceedings*, 1948.

† The number of workers may not always be a good measure of size. In an industry with an extremely high degree of technological advance, such as aluminum, a plant hiring 500 workers may be very large.

‡ Howard R. Bowen, "Trends in the Business Population," *Survey of Current Business*, March 1944, pp. 9-11.

as well as during World War II, there are several factors or conditions that seem to be rather favorable to small business. These can be briefly summarized.

1. It is true that small business has declined relatively to the total business, but the absolute activity of small business seems to have been maintained. During World War II, for instance, both the number of workers and the money value of the product of the small companies showed a slight increase. The facts point to a rather stubborn persistence by small business. In 1900 there were in the United States 1.54 businesses, incorporated as well as unincorporated, for each 100 people. In 1935 this figure stood at 1.56. Both of these years were low points. The high point was around 1.8 during 1925-29. The number of business establishments—the business population—relative to the population seems to increase during boom times and to fall during depressions and wars. From 1939 to 1944 the business population decreased by about 15 percent,* but a rapid comeback began immediately after VJ day and in December 1946 the business population of the United States reached an all-time high of almost 3,650,000 firms and companies. According to *Survey of Current Business,* this December 1946 number included the following:

Industrial field	Number of firms (in thousands)
Mining and quarrying	28
Contract construction	248
Manufacturing	308
Utilities, including transportation	223
Wholesale trade	169
Retail trade	1,674
Finance, insurance, and real estate	299
Service	697

2. The decrease in the number of small businesses during World War II was not primarily due to bankruptcy or to mergers and acquisitions. A decrease in the number of service industries, difficulties involved in obtaining materials and building up inventories, and the fact that many small proprietors turned to war work or other more lucrative outlets for the duration of the war were important factors.

* Frederick C. Dirks and Ernest J. Hopkins, "Private Capital Requirements," Post-War Economic Study No. 5, published by Board of Governors of Federal Reserve System, 1946, p. 45.

3. The increased relative output of the large units was highlighted greatly during the war by an increase in heavy manufacturing, which is the bailiwick of large-scale operations. Since the end of the war a larger proportion of our effort is being devoted to services and to trade which have been the special outlets for small business. The postwar era may encourage the development of new fields of activity, particularly after the tapering off of the war emphasis upon large-scale production of munitions and heavy durable goods.

4. The American people traditionally favor small business. Many authorities regard it as the bulwark of free enterprise. Special measures will be taken to make credit more available to the small business.*

5. Small business is not necessarily less efficient or less profitable than large business. We have already seen that if a business is too small, it may not be able to realize all the economies that go with improved technology. On the other hand, if it is too large, the administration may be difficult and too impersonal. The optimum, or most efficient, size of plant may be somewhere between these two extremes and will differ according to the industry and numerous circumstances.

Many investigators of this problem have pointed out that size does not necessarily mean high profits or great efficiency. The Federal Trade Commission reported that in 233 combined tests,

> large corporations, or a group of plants, showed the lowest cost or the highest rate of return on invested capital in only 25 tests. In these combined tests, medium size made the best showing in 128 tests and small size in 80 tests. Thus large size was most efficient, as efficiency is here measured, in approximately 11 percent of the total tests, medium size was most efficient in approximately 55 percent of the tests, and small size was most efficient in approximately 34 percent of the tests.†

There is much additional evidence that size does not necessarily make for a high degree of profitability. One of the earliest and best-

* Reference may be made to the studies and activities of the Senate Subcommittee to Study Problems of American Small Business and to the work of the Smaller War Plants Corporation. There is an increased appreciation on the part of bankers and government agencies of the need of special measures to finance small business. See Charles C. Abbott, *Financing Business During the Transition* (Committee for Economic Development Research Study), McGraw-Hill Book Co., 1946, pp. 78-81, 84-86.

† Temporary National Economic Committee Monograph No. 13, p. 14. Any student wishing to make a further study of this question is referred to this monograph.

known studies on this subject was that by Professor A. S. Dewing, who found that the earnings of the constituent companies of thirty-five combinations, most of which were formed prior to 1903, were between one fifth and one sixth greater than the average for the ten years following the consolidation.* Numerous other studies point to the conclusion that there is no proof that the largest company in an industry will have the lowest cost or enjoy the greatest return on investment.† The small business seems to have the advantage of a higher plant turnover ‡ and of greater flexibility in management. The increasing availability of cheap electric power, the use of plastics and light materials, and the development of special processes, such as welding, stamping, and die casting, tend to permit the carrying on of many efficient businesses in small units. As a matter of fact, the average size of the plant has decreased in many of our industries during the past 25 years. §

Forces working against small business. There are also certain conditions and forces working against the growth and prosperity of small business. These are:

1. A feeling that big business will be necessary to enable the United States to hold its position in international trade. Since other countries are tending toward government operation of such trade,

* A. S. Dewing, "Statistical Test of the Success of Consolidation," *Quarterly Journal of Economics,* Vol. XXXVI (November 1921), pp. 94-101.

† See *Competition and Monopoly in American Industry,* Monograph No. 21, Temporary National Economic Committee, pp. 311-14, for an enumeration of the findings on this problem. Most of the studies refer to the profits of combination. There is comparatively little evidence on the relationship between size of separate plants and their efficiency. It must be recognized that profits may come not only from superior efficiency but also from manipulation, strategic position, and monopoly.

‡ For all corporations included in the United States Treasury Department, *Statistics of Income,* 1939, the companies with assets of less than $50,000 had gross sales of about 5½ times the invested capital, and those with assets of $50,000 to $100,000 had gross sales of about 3⅓ times invested capital. Those with assets above $5,000,000 had gross sales of only ⅘ the invested capital. The small entrepreneur seems to have greater ability than the large to convert assets into sales. It must be recognized, of course, that small businesses are more likely to be those using large amounts of labor relative to capital or often renting rather than owning their quarters and even machinery. Small businesses often operate in the later stages of the production process, which requires fewer fixed assets relative to sales than do the earlier stages. (Frederick C. Dirks and Ernest J. Hopkins, *op. cit.,* pp. 53-54. On page 54 is found a table showing the gross annual sales per dollar invested in capital assets in 1939 for establishments of different sizes in the various industry groups.)

§ See paper by John M. Blair, "The Comparative Efficiency of Different Sizes of Business," at session of the American Economic Association, December 29, 1947, published in *Papers and Proceedings,* 1948.

we may be forced into similar government control or at least the operation of large organizations in the field. A significant related problem is that of the cartel under which a group of apparently independent companies form a pooling organization to control their markets, principally through the maintaining of the prices or the regulation of the output. The cartels * have been particularly notorious in their international phases, and in many countries this form of organization has received the special sanction of government. These cartels often attempt to control the supply or to divide the market in such a way as to discriminate seriously against those independent companies or nations refusing to cooperate.† It would seem unreasonable to encourage small business within a country when the industry may have to compete internationally for raw materials and for outlets with huge combines sponsored by governments.

2. The professional managerial ability available to the small business is scarce. Though a small business may be run by one man or by a one-family corporation, such a company may have little continuity. Its success often depends upon the efficiency, health, and life of the dominant stockholder. The large corporation, on the other hand, may have a professional management with a trained personnel and numerous apprentices and understudies. ‡

3. Special difficulties confront the small business in obtaining new capital. The severe depressions of the 1930's ate up reserve funds of small companies. Commercial banks look for great liquidity and do not like to lend on receivables and inventories, which happen to be

* Estimated at 56 in 1940. *Competition and Monopoly in American Industry,* Monograph No. 21, *op. cit.*, p. 219.

† An extensive literature has been built up on the subject of the cartel. One of the most significant treatments is *Cartels: Challenge to a Free World* by Wendell Berge, Public Affairs Press, 1944. A convenient short discussion is that by Thurman Arnold, "Cartels or Free Enterprise," Public Affairs Pamphlet No. 103, Public Affairs Inc., 1945. *The New Republic* of March 27, 1944, has a special analysis under the title, "Cartels: Menace of World Wide Monopoly." John Ise in *Economics,* Harper & Bros., 1946, pp. 145-51, gives a good summary of the problem of the international cartel. An exhaustive recent treatment of specific cartels is that by George W. Stocking and Myron W. Watkins, *Cartels in Action,* Twentieth Century Fund, 1946. See also Homer V. Cherington, *Business Organization and Finance,* The Ronald Press Company, 1948, Chs. 17 and 18.

‡ Attention has been called to the fact that our colleges and universities, specifically the schools of business, seem to train their students to enter "big business." Perhaps the emphasis should be changed. See speech by Under Secretary of Commerce William C. Foster, "What Government and Colleges Can Do for Small Business," before the American Association of College Schools of Business, St. Louis, May 16, 1947, published in mimeographed form by the Department of Commerce.

the most liquid assets of the small businessman. Investment bankers are not particularly interested in small capital flotations. If a small issue of stock or bonds by a relatively little-known company is floated in the investment market, the rate of interest or the cost of the capital may be much higher than that which would have to be paid by a large business.

4. Small business is generally more seriously affected by depression than large business. In discussing this question Professor Theodore N. Beckman says:

> According to the *Statistics of Income*, the percentage of deficit corporations to total corporations was a little over 64 in 1931 for small (less than $50,000 asset class) and large (over $1,000,000 asset class) corporations alike. For the large corporations, this ratio went up to 75.35 percent in 1932 and then began to decline until it reached about 34 percent in 1936 and 1937. But for the small corporations the ratio went up in 1932 to 83.77 and then declined but slightly to 64.06 in 1936 and to 67.07 in 1937. Small business suffers more during a severe business setback and its recuperative power is feeble indeed. Thus, as a result of depressions, small business tends to become smaller and big business grows relatively bigger and stronger.*

Classification of industries by degree of concentration. Industries may be roughly classified into five groups according to the degree and type of concentration:

1. Those in which one company has a complete or virtually complete control over the field. This is generally referred to as "monopoly."

2. Those in which two companies divide all, or practically all, of the field between them. These will either work together, or the one will dominate the other. This is called "duopoly."

3. Those in which several companies, say three to six, control the great bulk of the output, with perhaps one of these being in the dominant position. The output of each is a significant portion of the total for the industry. This is called "oligopoly."

4. Those in which there may be many companies, each attempting to differentiate his portion of the output by brand names or pack-

* Many of the weaknesses and strengths have been suggested by three sources: *Problems of Small Business*, Monograph No. 17, Temporary National Economic Committee, 1941, especially pp. 239-43; Howard R. Bowen, "Trends in the Business Population," *Survey of Current Business*, March 1944, pp. 8-13; and Theodore N. Beckman, "Large Versus Small Business after the War," American Economic Review, Papers and Proceedings, Vol. XXXIV (March 1944), pp. 94-106. The quotation above is from this article, pp. 99-100.

aging, so that customers will develop a familiarity with or preference for the goods of one company and will hesitate to shift to that of other producers. This is called "product differentiation" or sometimes "monopolistic competition."

5. Those in which there are numerous companies each doing only an insignificant proportion of the total business, no one company having any control over the market. This is called pure or unlimited competition or, perhaps more realistically, "workable competition."

Illustrations and extent of each. The best illustration of a monopoly in the industrial field has been aluminum. For over fifty years prior to World War II, the Aluminum Company of America produced all of the nation's output of aluminum ingot. For some thirty years it is thought to have controlled more than 90 percent of the available bauxite.* Even during World War II, when the Defense Plants Corporation was instrumental in starting new aluminum ingot producing plants, 96 percent of the output of such Defense Plants Corporation plants was controlled by the Aluminum Company of America as managers.† Virtually complete monopoly has also been held by the United Shoe Machinery Corporation, Bausch and Lomb Optical Company in the United States, Pullman, Inc., International Nickel Company of Canada, Ltd., and other companies. Railroad and utility companies have monopolies in their respective areas.

Until the recent merger, a two-company control was exercised over telegraph communications by Western Union and Postal Telegraph, with Western Union as the dominant company. In bananas the United Fruit Company and the Standard Fruit and Steamship Company control the field, with the United Fruit very much dominant. General Electric Company and Westinghouse Electric Corporation have a duopoly in electric lamps, International Business Machines and Remington Rand in accounting machines, and Texas Gulf Sulphur Company and Freeport Sulphur in their product.

The extent of oligopoly is revealed by the fact that "among 1807 products, representing nearly half, by number, and more than half by value, of those included in the *Census of Manufactures* for 1937, there were 291, or more than one sixth of those in the sample, in which the leading producer accounted for 50 to 75 percent of the

* *Competition and Monopoly in American Industry,* Monograph No. 21, *op. cit.,* p. 69.

† Charlotte Muller, "The Aluminum Monopoly and the War," *Political Science Quarterly,* March 1945, pp. 14-43.

total supply." * In industries producing $10,000,000 or more during the year, the four largest companies accounted for more than three fourths of the total in each of 121 products. Familiar illustrations are the companies in such industries as snuff and chewing and smoking tobacco, tractors, typewriters, automobiles, rubber tires, refrigerators, milk bottles, granulated sugar, tin cans, rayon, various forms of iron and steel.† Each of the companies in turn has generally been the product of its own individual combination process. Among the producers a system of price leadership in some form or other is often in effect, or they may even have loose price agreements.

Product differentiation is characteristic of most manufactured consummer goods in the United States. By means of brand names or other devices, accompanied by extensive advertising campaigns, the producer attempts to create in the mind of the public the impression that his product is different from, and superior to, all the others. These producers are comparatively numerous and may or may not engage in large-scale production. Toothpaste, canned milk, cold cream, prepared breakfast food, soap, gasoline, towels, and aspirin furnish familiar illustrations. Many products, such as cigarettes and automobiles, may be classified under both monopolistic competition and oligopoly.

Under the various forms of monopoly or partial monopoly each producer accounts for such a large proportion of the total output that he may by his own action influence the market. The prices are "administered" or set by each company, but each has its eyes focused on the others, especially the leaders. Price changes are infrequent and relatively small in amount. As a general rule, either high investment costs or patent and trade-mark rights or the advantage of an early start tend to prevent or hinder entrance by others into competition with those already in the field.

Under pure or workable competition, each producer is responsible for such a slight proportion of the total output that he can have little appreciable effect or influence on the price. Prices are set by the forces of the market rather than by any one producer. They tend to fluctuate widely and rapidly. Theoretically, producers are free to enter or leave the industry at will, and such potential competition tends to keep pure profits at a minimum.

* *Competition and Monopoly in American Industry,* Monograph No. 21, *op. cit.*, p. 113.

† *Ibid.*, pp. 116-17. See also National Resources Committee, *The Structure of the American Economy,* 1939, Part I, for diagrams and tables showing concentration in American industries.

Industries characterized by fairly effective competition have included agriculture, soft coal mining, petroleum extraction, textiles (considerable concentration has developed lately), knitted goods, dresses, leather, shoe manufacturing, food products, wholesaling, retailing, and the service trades.

Agriculture has traditionally been an industry of great competition. As we have already seen, the number of farmers of various kinds is almost 6,000,000. The farming unit is small, averaging about 195 acres, and each individual has almost no specific influence on the condition of the market. One of the interesting phenomena in an agricultural community is that farmers will help one another in the planting or harvesting of the crops. They can do this for a competitor without hurting their own interests. Federal legislation has tended, however, to force farmers to cooperate in a broad way in regard to output and the general level of price. The stock and produce exchanges, subject to certain government controls, are also guided by the principle of competition, and prices set on such exchanges are continually fluctuating.

Coal mining is developing considerable unity of action for one reason because of industry-wide collective bargaining. In anthracite coal the geographical localization of the resources is an important factor making for concentration of ownership. For the sake of conservation, petroleum extraction should have some unity of action.

Influences and conditions making for competition are low relative investment; emphasis upon individuality and style; the possibility of farming out part of the work, which can be done in the converting and cutting stages of textiles or which was done with many war contracts during World War II; the profitable use of the family-size shop or unit; and the importance of a tradition of individualism. Contrast the textile and the steel industries, for instance, with respect to the amount of investment. One million dollars will build and equip an adequate plant for producing print cloth, while 100 times that sum is required to construct a steel mill. In textiles the four largest companies produced only one twelfth of the total output in 1935, while the four largest steel works were responsible for one half the product in that industry.*

* Two historical references are revealing. "In applying for a loan [in 1833] from Nicholas Biddle, president of the Second U. S. Bank, Mr. James P. Allaire said that the property of the Howell [Iron] Works company represented an investment of $170,000." From Charles S. Boyer, *Early Forges and Furnaces in New Jersey*, University of Pennsylvania Press, 1931, pp. 125-6. And "One could get a forty-spindle jenny of the best sort for £6 in 1792; a big scribbling

It is difficult to classify industries into airtight groups. Shoe manufacturing, for instance, is considered a highly competitive industry, though the International Shoe Company is said to possess enough capacity to make a pair of shoes annually for each inhabitant of the United States. The fixed charges for shoe manufacturing are kept low by the United Shoe Machinery Corporation's policy of leasing its machinery at a specified royalty per pair instead of selling it to a shoe manufacturer, who is thus relieved of the high fixed charges which are a necessary accompaniment of operating his own expensive equipment.

[Problems will be found at the end of Chapter 18.]

or carding machine could be bought for £50 When fire destroyed a scribbling mill and all its contents in 1821, the total damage was only £1500, and when an extensive corn and scribbling mill with all the valuable machinery and stock was gutted, the loss was only £5000" Herbert Heaton, "Financing the Industrial Revolution," *Bulletin* of the Business Historical Society, February, 1937, p. 2.

Chapter 18

The Combination Movement—Mergers

VARIOUS forms of combination are possible, but we shall here consider the merger. In the merger, there must be one company which is instrumental in taking into itself the other companies. This is generally referred to as the merging company.* A new company may be organized for this purpose, or one already existing may occupy this position. Then there are the companies that are being merged. These are dissolved when the combination has been consummated, though often the name of a merged company is retained as the distinctive name of a division.

In regard to the method of payment, which, of course, involves consideration in the form of securities issued by the merging company, we shall here take up two basic situations: (1) Where only common stock is involved—that is, where the companies about to be merged have only common stock outstanding and the merging company will also issue only this form of security; (2) Where the constituent companies have outstanding several kinds of securities, the probable result being that the merging corporation will also have a capital structure containing a variety of stocks or bonds.

WHERE ONLY COMMON STOCK IS INVOLVED

The table on page 333 gives figures for three corporations in the same type of business. A promoter, who is also a prominent stockholder in one of the companies, wishes to combine the three into a new corporation, to be called The United Corporation. His hope or intention is to induce the security holders of *A*, *B*, and *C* to accept

* We are here drawing no distinction between merger and amalgamation but are using the term "merger" to cover both of these processes or results.

stock in United in exchange for their old holdings. Certain trade and divisional names may, of course, be retained for their good-will value.

According to the promoter's plan, the stockholders of *A, B,* and *C* are, in effect, to dissolve their companies, pay off the creditors, and then sell the remaining assets to The United Corporation. Instead of cash the respective stockholders are to receive their compensation in the form of securities in the new company. Each corporation has only common stock outstanding, and arrangement is to be made to pay off all the outstanding current liabilities. The chief assets turned over to the new corporation will consist to a large extent of plant and good will. The cash and investments of each company will be used as far as necessary to pay off the current liabilities. The balance of the current assets will then, according to the plan, accompany the plant and good will.

	Company *A*	Company *B*	Company *C*
Average annual net earnings during the preceding five years	$100,000.00	$50,000.00	$150,000.00
Minimum net earnings during this five-year period.	$10,000.00	$25,000.00	$100,000.00
Value of the business or the investment according to the books.	$1,000,000.00	$750,000.00	$900,000.00
Common stock outstanding, par $100.	$600,000.00	$700,000.00	$800,000.00
Average net earnings as percent of value of investment . .	10	6.67	16.67
Earnings per share of common stock.	$16.67	$7.14	$18.75
Market price per share of common stock.	$150.00	$75.00	$225.00
Capitalized value of business at 10 percent.	$1,000,000.00	$500,000.00	$1,500,000.00

The valuations of the companies given on their books do not necessarily correspond to the values as determined by the capitalization process. An interest rate of 10 percent has been used in our

calculations. The market prices of the common stock are included in the comparison in order to give some idea of the position each company holds in the eyes of the financial public. The stock of *A* sells at 9 times earnings, that of *B* at about 10.5 times earnings, and that of *C* at 12 times earnings.

Fixing the value of the investment of each company and determining the amount of new stock to be given in exchange for each share in the respective old companies are matters of bargaining, not unlike horse trading. While endeavoring to place as great a valuation as possible on their company, the stockholders of each company will belittle the value of the new consolidation whose stock they will be asked to accept, just as the owner of a horse will try to boost its value and to run down the commodity or even the money which he is asked to take in exchange.*

Points of negotiation. The problem, accordingly, becomes threefold:

1. What is the probable and reasonable value of the consolidated company?

2. What is the value of each company?

3. How shall the securities issued by the new company be distributed to the stockholders of the old companies? If the probable value of the new company is greater than the total of the values of the three companies, how, also, shall this additional value be distributed or allocated among the owners of each company?

1. *What is the probable and reasonable value of the consolidated company?* This is a matter of guesswork, hope, and prophecy. Sometimes the planned development of a new improved marketing and promotional organization may boost the estimates of the gross sales or gross revenues. Elimination of competition may permit the new company to raise the selling prices of the products. In other cases, anticipated economies may reduce the costs and expenses per unit of output. Too often, of course, the increased net income may be merely a bubble and a promoter's dream.

Whatever the basis of the computations and whatever their probable validity, the fact remains that estimates are made. Generally,

* In money transactions it is often assumed that the value of the money received in return for an article is of a constant value. We are becoming keenly aware of the fact that money also fluctuates in value. In case of threatened inflation, for instance, the prices of articles go up, reflecting a fall in the purchasing power of the money received in return for them.

of course, this forecast exceeds the total of the individual average past earnings. If the promoters did not have this hope, there would be little point in their advocating the consolidation.

The estimated future net earnings of the consolidated company, The United Corporation, are $400,000. This represents an increase of $100,000 over the total net of the individual companies. The capitalization of these anticipated earnings gives a presumptive value of the new organization and its assets as a business. At an interest rate of 10 percent, the capitalized value is $4,000,000 compared with an aggregate of $3,000,000 for the three separate companies.

This method of computing the value of the consolidated company may be criticized on the ground that the new company is less certain to earn the additional $100,000 than it is to earn the $300,000. The $300,000 is backed by experience, while the $100,000 is based on hope. Our method of arriving at the value of $4,000,000, however, placed both the $300,000 and the additional $100,000 on the same basis. Accordingly, it may be advisable to capitalize the prospective additional income of $100,000 on a more conservative basis, that is on the basis of a higher percentage, say 20 percent. The multiplier will thus be 5 rather than 10. The present value of the anticipated additional earnings will then be $500,000. When we add this to the $3,000,000, we get a total prospective value of the consolidated company, as a business, of $3,500,000.

2. *What is the value of each company?* This problem also necessitates the fixing of an appropriate interest rate and the computation of reasonable and comparable earnings. These are extremely difficult problems, the solution of which depends upon numerous factors. And when the figure is arrived at, it may be wrong! We are assuming for our initial purposes that the earnings figures are correct and comparable with one another, that the rate of interest is 10 percent, and that the total present value of the three companies is, therefore, $3,000,000.

3. *How shall the values be distributed?* This question involves the distribution of the $3,500,000, which we have arrived at as the value of the consolidated business. There are two phases to this specific problem: (1) The distribution of the $3,000,000 reflecting the values of the old companies; (2) The distribution of the additional $500,000 reflecting the anticipated additional earnings or savings. Here we have horse trading at its height.

Bases of distribution. Let us first take up the distribution of the $3,000,000. According to one method this would be distributed to the stockholders of *A*, *B*, and *C* in proportion to the value of the investment of each as shown by the individual books, according to which the total value is $2,650,000. Of this, *A* contributes $^{100}/_{265}$, *B*, $^{75}/_{265}$, and *C*, $^{90}/_{265}$. If this method is used, the stockholders of *A* would receive $1,132,000, those of *B* $849,000, and those of *C* $1,019,000. If the promoters wish to issue less than $3,000,000 of new stock and thus to create a surplus, the above amounts would simply be pared down proportionally.

This method of distribution places undue stress upon the value of the assets as set up on the books of each individual company. The stockholders of Company *B* in particular would favor this, but those of Company *C* would certainly object. Those of Company *A* probably would also object.* Another approach is to allocate the stock in proportion to the income of each company, or, what amounts to the same thing, its proportion of the total capitalized value. According to this method, the stockholders of *A* will get $^{100}/_{300}$, those of *B* $^{50}/_{300}$, and those of *C* $^{150}/_{300}$ of the new stock; or, if the common stock is to total $3,000,000, $1,000,000, $500,000, and $1,500-000, respectively.

The stockholders of *A* and *C* will lean toward the distribution of stock in proportion to income, although there may be an objection that thereby the holders of *A* would be given too much. The net earnings of *C* appear to have been the steadiest of all, in that its minimum net during the period never fell below ⅔ of the average, while the earnings of *A* apparently fluctuated widely. *B* occupies a position between the two. A comparison of the earnings per share and the price of the common stock of each company seems to bear out this contention. The market has appraised the common stock of Company *A* at only 9 times the earnings, while it has valued that of *B* at slightly more than 10 times and that of *C* almost 12. If this objection prevails, the suggested distribution on the basis of earnings must be modified so as to place some emphasis upon the regularity of earnings.

Another way of putting this objection is to argue that the rate of interest—that is, 10 percent—used in capitalizing the net income of *A* was too low. The rate should have been higher, or, in other

* *B* has listed its total assets or investment value at 15 times the annual net, while *A* and *C* have assigned them a figure of 10 and 6 times, respectively.

words, the multiplier should have been smaller than that used because the earnings are uneven and irregular. By the same token, the interest rate allowed in the capitalization of the earnings of *B* should probably have been somewhat higher than that employed in the case of *C*.

Whether the actual distribution is to be given a slant toward plant values or toward the average net earnings and to what extent the formula is to be modified by varying regularity of earnings are problems the solution of which cannot be reduced to a mathematical basis. It would be possible also to distribute the new stock on the basis of the total value on the market of each company's stock. *A*'s stock has a value of 6000 × \$150 or \$900,000, and *B*'s is valued at 7000 × \$75 or \$525,000, while *C*'s is worth \$1,800,000. The ratio of the stock received by each according to this system of computation would be 900/3225, 525/3225, and 1800/3225. The final agreement will depend upon the bargaining ability of the parties and their relative eagerness to enter the combination.

Distribution of value arising from economies of combination. The distribution of the additional \$500,000 stock represented by the anticipated additions to the earnings brings up new problems. The extra earnings will presumably come from the anticipated economies or from the better strategic position of the consolidated company. The compensation to the promoter and to those who have incurred the organizational expense should obviously be met out of this stock. The amount of promoter's compensation depends upon the services rendered by and the bargaining position of the promoter and upon the precautionary steps taken by him to protect his position. Let us assume the promoter's share and the amount required for organizational expenses to total \$50,000.

The remaining \$450,000 of this stock will be distributed to the old stockholders in accordance with the anticipated contribution of each company to the earning of the extra income. The companies will not contribute equally to this additional prospective income, particularly if the advantages of the consolidation involve economies in operation or in marketing, or in the obtaining of capital and raw materials. Company *B* has apparently been less efficient than *A* and *C*, while *C* has been the most efficient of all. *B* has earned only 6.67 percent on its book plant value, compared with 16.67 percent and 10 percent for *C* and *A*, respectively. Company *C* has earned 50 percent more than *A* on a lower book value, while *C* has earned

three times as much as *B* on an investment valued at only 20 percent greater than that of *B*. Company *A* earned twice as much as *B* with an investment only one third greater than that of *B*.

If we consider 10 percent as the normal return, anything below that is subnormal and anything above that is excess. If we use percentage earned on plant as a method of comparison, it appears that *A* is about average or normal, *B* is subaverage, and *C* is the only company above average. It could, therefore, be argued that all the stock to be issued because of the anticipated extra returns should go to the stockholders of *C*. The stockholders of *A* and *B* will probably not agree to this contention. They may argue that, while it is true that their companies were less efficient in the past than was *C*, such comparative inefficiency was due to the management and not to the quality of the assets. Since the plants now are to go under a common management, presumably bringing together the best elements of all companies and eliminating the weak spots, the plants of *A* and *B* should be given at least some credit for the possible extra earnings. Moreover, the elimination of *A* and *B* as active companies may be beneficial, inasmuch as competition from a less profitable concern or from a company with less efficient management may be more destructive than that from a more profitable and more efficient organization.

The exact formula adopted to settle this problem is, again, a matter of horse trading. Much will depend upon the confidence each company has in the books kept by the others. Net income may have been padded in anticipation of just such an occasion. The basis used for evaluating the plant on the books may have differed widely among the companies. The formula adopted may, therefore, in the final analysis rest upon the willingness of the parties to accept each other's bookkeeping figures.*

WHERE VARIOUS KINDS OF SECURITIES ARE INVOLVED

In our discussion so far, the original companies had only common stock outstanding and The United Corporation was to issue only common stock. In many instances, however, bonds and preferred stock must also be considered.

Suppose Companies *A*, *B*, and *C* had had the following capital structures and earnings and financial records:

* See Appendix K for merger of Tubize Rayon Corporation into Celanese Corporation of America.

	Company *A*	Company *B*	Company *C*
Common stock outstanding, par $100	$400,000	$400,000	$500,000
Preferred stock, 6 percent	$100,000	$200,000	$300,000
Bonds, 5 percent	$300,000	$100,000	.
Average net earnings before interest	$100,000	$50,000	$150,000
Minimum annual income before interest	$10,000	$25,000	$100,000
Value of the business or investment according to the books	$1,000,000	$750,000	$900,000
Earnings on investment before interest	10%	6 67%	16.67%
Bond interest	$15,000	$5,000	.
Preferred dividend	$6,000	$12,000	$18,000
Times interest earned—average year	6 7	10	. .
Times interest earned—minimum year	0.67	5	. . . . .
Times interest and preferred dividend earned—average year	4 8	2.9	8.3
Times interest and preferred dividend earned—minimum year	0.48	1.48	5.6
Earnings per share common stock—average year	$19.75	$8.25	$26.40
Earnings per share common stock—poorest year	*Deficit*	$2 00	$16.40
Ratio of bonds to value of business or investment	30%	13.3%	. . .
Ratio of preferred stock to value of business or investment	10%	26.7%	33 3%
Ratio of bonds and preferred stock to value of business or investment	40%	40 0%	33.3%
Capitalized value of business at 10 percent	$1,000,000	$500,000	$1,500,000
Ratio of bonds and preferred stock to capitalized value of business	40%	60%	20%

Let us again assume that the prospective capitalized value of the new company is $3,500,000. How many bonds and preferred and common shares should the new company issue? How should the new securities be distributed among the old holders?

Special problems where various kinds of securities are involved. The statistical summary reveals great differences in the financial standing of the stocks and bonds of the three companies. The preferred stock of *C* seems to be stronger than the preferred stock and the bonds of *A* and probably even of *B*. The bonds of *B* seem to be stronger than the bonds of *A*, particularly in view of the fact that in the poorest year *A* earned an amount equal to only two thirds of its interest requirements.

Special concessions will certainly have to be given to the holders of the preferred stock of *C*. There being no bonds ahead of them, these shareholders have the first claim to the net income of *C*. They may, accordingly, insist on being given bonds in the new company. If the consolidation is to have only one kind of bonds outstanding—say, 5 percents—the holders of the 6-percent preferred shares of *C* may command a par value of bonds in excess of $300,000, perhaps as high as $400,000. These would pay total interest of $20,000, or $2000 in excess of the dividends on the preferred, an extra return which may be justified by the fact that the preferred holders of *C* are giving up the certainty of *C*'s experience for the uncertainty of The United Corporation.

The bonds of *B* are in general in a stronger position than those of *A*. The ratio of bonds to asset value favors *B*, even if we compare them to the value of *B* arrived at by capitalizing its earnings at 10 percent. The times-interest-earned test favors *B*, though this advantage is considerably dimmed when the interest and preferred dividends are lumped together in an over-all coverage. Then, also in the poorest year the interest on the bonds of *B* was earned 5 times, while in its poorest year *A* failed to cover the bond interest. These conditions point toward a differentiation in the treatment of these two bonds. The holders of the bonds of Company *B* could rightfully insist on $120,000 of The United Corporation bonds in exchange for their $100,000. The bondholders of *A* could then be given $300,000, or par for par, of bonds in United.

The total 5-percent bonds of the new consolidation will thus be $820,000, and at 5 percent the interest will be $41,000. These figures compare with a combined asset or business value on the books of

$2,650,000, part earnings of $300,000, and prospective earnings of $400,000. The capitalization of these prospective earnings gives, as we have seen, an estimated plant value of $3,500,000.* The ratio of the bonds to book value of the combined business will be 31 percent. The ratio to the anticipated value will be 23 percent. The times interest earned on the basis of hoped-for income will be almost 10.

For an industrial company, the amount of outstanding bonds relative to plant value is rather high. If the capital structure seems to be top-heavy, it might be advisable, from the long-term point of view, to induce the holders of the preferred stock of Company *C* to accept, say, half in bonds and half in preferred stock with perhaps a little extra of the latter, and to persuade the bondholders of *A* and *B* also to accept a large portion in preferred stock. We are assuming that these security holders are unwilling to agree to this alternative proposal.

The preferred stock of *A* and *B* totals $300,000. That of *A* is stronger than that of *B* in the average years, but it was considerably weaker in the poorest year. Since these points of strength and weakness may balance each other, the holders of these shares may accept equal treatment. This will require $300,000 of such stock in the new company.

The common stock of *C* is superior to that of *A* and *B* both in regard to earnings per share and regularity of earnings, and its holders will certainly want better treatment than the others. They too are being asked to give up the certainty of successful experience for the uncertainty of hope. The common holders of *C* should demand, and get, preferred stock to compensate for the uncertainty and extra common stock and to help offset the dilution of their values by the mixing with the poorer stocks of *A* and *B*. They may be willing to accept $200,000 of preferred stock in exchange for $200,000 of the common, and to agree to special treatment for the other $300,000 of common to be discussed later.

This makes a total preferred stock of $500,000 and dividend charges of $30,000. The ratio of total bonds and preferred stock to book value of the business is thus $1,320,000 ($820,000 bonds plus $500,000 preferred) to $2,650,000, or about 50 percent. The ratio

* This figure, it will be recalled, was obtained by capitalizing the regular prospective earnings, as measured by the past earnings, at 10 percent and by capitalizing the prospective additional income at 20 percent.

to the expected value of the plant is 38 percent. The combined preferred stock dividends and bond interest—$71,000—will be earned between 5 and 6 times on the basis of anticipated earnings of $400,000.

Position of common stock. Once upon a time financial circles had the impression that only the sky furnished the limit to the common stock issued by a company. The amount of earnings or of assets behind the common stock of a combination or of a reorganization or even of a brand-new enterprise was often considered unimportant and irrelevant. Since common stock represents merely a residual claim, it was argued by many that its value depends merely on the relation between the assets and earnings and the number of shares outstanding. Other things being equal, the greater the number of shares the smaller the value of each, and the fewer the shares the larger the value.

Though there is nothing to be said against this arithmetic, the fundamental assumptions have changed. It is now considered desirable that the stock of a newly organized corporation or consolidation have substantial value. The common stock of a reorganized company should also have value. Holders of even the senior bonds and preferred shares are interested in the earnings of and the assets behind the common stock. Bonds of a corporation cannot have a good credit standing if the common stock has little value. The common stock may be said to be a "fund" for the protection of the senior security holders. One security of a corporation cannot be good, if the others are bad. Nor can it be bad if the others are good. The planners of the capital structure of The United Corporation must issue sufficient new common stock to treat the old holders fairly, but they must limit its quantity so as to maintain a reasonable balance between such stock and the earnings and the probable value of the consolidated company.

We allotted $200,000 of preferred in exchange for that amount of common stock of *C*. This leaves $300,000 of common stock of *C* yet to be accounted for. The holders will not be satisfied with a share-for-share arrangement. The superior strength of their stock puts them in a solid position to demand more than 2 shares of stock, let us say 2½, for each of their old. Such an arrangement would give them $750,000.

The common stock of *B* is in some respects stronger and in others weaker than that of *A*. The earnings per share of *A* are $19.75 com-

pared with \$8.25 for *B*. The common stock of *A* is equal to 40 percent of the capitalized value of its income, compared with 80 percent for *B*. *A* has earned 10 percent on its plant according to the books, while *B* has earned 6.67 percent. These are all strong points for *A*. But in the dickering and bargaining the stockholders of *B* are sure to point out that in *B*'s worst year its common stock earned \$2.00 per share, while there was a deficit in the case of *A*. On the average, it is true, *A* earned its bond interest and preferred dividends 4.8 times compared with 2.9 times for *B*, but in the poorest year *A* earned only half the interest and preferred dividends while *B* covered them one and one-half times.

No "correct" and conclusive solution can be given for a controversial issue of this kind, but it would seem that the common stock of *A* is considerably superior, share for share. Thus, the holders of *A* are in a position to demand better treatment than the holders of *B*. The negotiators propose to give 1⅛ share of new stock to *A* and ½ share to *B* for each old. *A*'s stockholders thus get \$450,000 and *B*'s get \$200,000 par value of stock in the new company.

If we allow \$50,000 common stock for promoter's fees and organization expenses, the total common stock will be \$1,450,000. Since the anticipated net income is \$400,000 and the bond interest and preferred dividends total \$71,000, the anticipated amount left and earned by the common stock will be \$329,000. If the stock has a par value of \$100, there will be 14,500 shares, and the earnings per share will be \$22.69.

The plan. The distribution and exchange of the securities can be summarized as follows:

	Company *A*		Company *B*		Company *C*		Promotion and organization
	Before merger	After merger	Before merger	After merger	Before merger	After merger	
Bonds, 5 percent	\$300,000	\$300,000	\$100,000	\$120,000	.....	\$400,000	
Preferred stock, 6 percent...	100,000	100,000	200,000	200,000	\$300,000	200,000	
Common stock..	400,000	450,000	400,000	200,000	500,000	750,000	\$50,000

The simple balance sheet of the combination will thus stand as follows:

Assets		Liabilities	
Capitalized value of the business or investment	$3,500,000	Bonds, 5 percent	$ 820,000
		Preferred stock, 6 percent	500,000
		Common stock, 14,500 shares, par $100	1,450,000
		Surplus	730,000
	$3,500,000		$3,500,000

The above computations and solutions are the result of trial and error, of give and take. The process is one of straight bargaining. The strength and weakness of each security are matters of opinion. The stockholders and bondholders may or may not be eager to sell—that is, to exchange their securities for those of the consolidation. Their companies may or may not hold a strategic position in regard to markets, advertising, customers lists, availability to raw materials, efficiency of operating and managing personnel. Personal factors and jealousies may be present. Whether the stock of a company is closely or widely held is sometimes an important influence. And of special importance is the ability of each group of bargainers to maintain a poker face and to know when to bluff and when to call the bluff.*

Criticism and analysis. Place yourself in the position of any one of the groups of security holders and criticize or make suggestions for changes. Were the different groups of security holders justly treated? Was there an equitable allocation of the voting control? Was there a fair distribution of earnings? One approach to the answers is to compute the earnings going to each of the three former groups of common stockholders, if the net income before bond interest (1) actually

* Andrew Carnegie demanded and received from the organizers of the United States Steel Corporation mortgage bonds of $300,000,000 in exchange for his holdings in the Carnegie Steel Comany. J. P. Morgan, Sr., had arranged this deal.

Months later Carnegie is said to have met Mr. Morgan while eating breakfast on a transatlantic liner.

"Do you know, Mr. Morgan," said Carnegie, "I have been thinking it over, and I find I made a mistake. I should have asked you another hundred million for those Carnegie properties."

"If you had, I should have paid it," responded Morgan.

Upon hearing this Carnegie felt so sick at heart that he lost his appetite. (Gustavus Myers, *History of the Great American Fortunes,* The Modern Library, Random House, 1936, p. 600; quotations from *Wall Street Journal,* August 2, 1909.)

became $400,000, or (2) remained at $300,000. Remember that the earnings per share in the first condition were $22.69. If the net income before bond interest is $300,000, the earnings per share of common are $15.79. The following table shows how the common stockholders fared.

	Company *A* (4,500 new shares)	Company *B* (2,000 new shares)	Company *C* (7,500 new shares)
Amount earned in average year before consolidation	$ 79,000	$33,000	$132,000
Amount earned in consolidation, when net income is $400,000	102,105	45,000	182,175*
Amount earned in consolidation, when net income is $300,000	71,055	31,580	130,425*

* Includes $12,000 or 6 percent dividend on 2,000 preferred shares.

Summary. Combinations may be such loose associations as pools, cartels, the community of interest, and price leadership, or they may involve property and proprietary relationships as the lease, the holding company, and the merger. With reference to the type of article controlled, combinations have been classified into the horizontal and the vertical forms. To these two groups may be added the "circular" combination, which involves the diversification of products and the use of a common marketing channel. Another important group that has developed is referred to as the "conglomerate," this being merely a hodgepodge.

The causes of and motives for combination are (1) those which facilitate or lubricate the process of organizing combinations; (2) those which have as their primary purpose the increasing of the income of the participants; (3) those which represent an attempt to safeguard the position of the constituent organizations; and (4) those which have to do with the direct protection of the social welfare.

There have been four main periods of combination in the United States. The first, from the Civil War to about 1893, was character-

ized by a desire to eliminate competition as well as to find the most efficient size of the operating unit. The leaders in this combination period naturally were operating men rather than financiers. The second period, from 1897 to 1904, began with the favorable attitude toward combinations which was initiated by McKinley but was ended by the "Big Stick" of Theodore Roosevelt. This period was activated by bankers and professional promoters in search of strategic advantages and financial gain. The holding-company device rose to new heights at this time. Any economies sought in this period were generally of the tactical variety. The formation of the United States Steel Corporation had its root in the fear that one or more of the companies would close the others out from raw materials or from the market.

The third period of combination came between World War I and about 1929. The national administrations again were tolerant of combinations, and again the people worshiped at the shrine of bigness. Though all paid a lip service to "efficiency," many combinations were actually rearrangements and even pyramids of those already formed. Some had as their motive the obtaining of advantages in selling and distribution. The conglomerate combination, with no motive at all except a desire to combine, was becoming frequent. During this time the holding company reached the highest point of its popularity, being especially dominant in the public utilities.

The fourth period of combination began during World War II, an important early contributing cause being the general impression that large companies had the "know how" and could fulfill government contracts more effectively. Moreover industries in which small-scale production is generally common, such as private construction, wholesaling and retailing, were discouraged by various wartime controls. During the postwar period companies are combining in order to attain independence and diversification, as well as to eliminate competition. Courts have held that the Clayton Anti-Trust Act does not apply to the actual acquisition of the assets of another company. In spite of this continued trend toward combination, small business will probably maintain an important place, one reason among others for this survival being that size does not necessarily mean high profits or great efficiency.

As to the degree of concentration, industries may be classified under monopoly, duopoly, oligopoly, product differentiation, and competition. All of these are represented in the American economy.

In the formation of a combination, such as the merger, the process is essentially one of selling the merged companies to the one doing the merging. The merging company may be already in existence, or it may be formed for the purpose. The intention, of course, is for the merging company to pay for the securities of the merged organizations by means of its own stock or bonds rather than by means of cash and, when 100 percent control has been obtained, to dissolve them.

The essential problems, then, become the same in the merger process as in any sale: (1) What will be the value of the merging company after it has acquired all the intended assets? (2) What is the value of each of the companies invited into the merger? (3) How shall the various security holders of the merged companies be paid—that is, in what ratio or in what proportion shall they be given the securities of the merging company?

The probable value of the consolidated company generally involves the capitalizing of its estimated earnings. It may be advisable to capitalize the already proved earnings of the constituent companies at one rate of interest and the possible and hoped for additional earnings or economies at a higher rate, that is, with a smaller multiplier. The actual earnings represent an accomplishment which can probably be repeated, while the anticipated additional income or savings are a matter of prophecy blended with hope.

The value of each of the constituent companies going into the combination also becomes a matter of capitalizing the earnings. Naturally each company will present as rosy a picture as possible of its record and of its future in order that its security holders will be able to strike the best possible bargain in obtaining the bonds and stock of the merging company in exchange for their old holdings.

PROBLEMS

1. At the time of the introduction of nylon, the DuPont organization announced the planned construction of a plant which was to cost $8,000,000, in addition to the large investments which had been made for research. At about the same time Celanese Corporation of America announced the expenditure of $10,000,000 on a new plant to produce a new synthetic yarn.

What relation is there between these facts and the trend toward combination?

2. The point has been made by many writers, both radical and conservative, that competition leads naturally and inevitably to monopoly. Would you say this is true of all competition?

3. Wages in the soft-coal industry are about two thirds of the total costs. Do you see any connection between this fact and the relatively small degree of concentration in that industry?

4. Small business has been called the "seedbed of democracy." What is meant by this? Would you agree with this metaphor?

5. It is true that the growth of big business has taken place in part at least at the expense of small business. Referring to such large industries as automobiles, electric lamp manufacturing, the movies, and petroleum refining, would you say that the rise of large business has in some respects also created opportunities for small businesses? Give illustrations.

6. The merger of Tubize Rayon Corporation into Celanese Corporation of America is described in Appendix K.

a. Do you think this was a legitimate and "natural" merger?
b. How did the negotiators of this plan arrive at the exchange ratio of 1 for 1, or share for share, in the case of the preferred stocks?
c. Why is the preferred of Tubize referred to as 4.75% preferred stock while that of Celanese is referred to as $4.75 preferred stock?
d. Why was the exchange figure arranged at ⅔ of a share of Celanese common for 1 share of Tubize?

7. Combinations are frequently being formed. Check the financial magazines and the newspapers for current illustrations. Three points should be of special interest: (1) Why was the combination formed? (2) Should it have been formed? (3) How was it formed?

Part III

Social Aspects of Corporation Finance

Chapter 19

The Mathematics of a Bond Investment —Some Elementary Concepts

Introduction. So far in our discussion we have been concerned primarily with specific corporate problems and the measures taken by the corporation to solve them. We now shift our attention to the individuals who deal with the corporation and who influence or are influenced by its activities. We may classify these into four groups:

1. The suppliers of labor, or the workers.
2. The purchasers of goods and services, or the consumers.
3. The regulators and the taxers, or the government.
4. The suppliers of funds, or the investors.

In addition—and all important—there is the effect of the corporation upon our social thinking and upon the broad structure of the economy.

A discussion of the first two of these groups, the workers and the consumers, cannot be undertaken here. Each of these represents a separate study. Likewise, a detailed analysis of the government as a general regulating and taxing authority would lead us too far into the problem of social control and fiscal policy. We shall, however, consider some special phases of the relation of the corporation to the broad general welfare. And we are vitally concerned with the fourth of these groups—the suppliers of funds or the investors. We shall first consider the investor and his relation to the corporation, and shall, then, emphasize the impact of the corporation upon our social thinking and upon our basic economic processes.

All the topics—those already taken up and those to follow—are closely interrelated. Par value, stockholder's liability, internal financing, recapitalization, combinations, and numerous other subjects already discussed have repercussions upon one another and upon the worker, the consumer, the government, the investor, and—most

important—upon our social system. Similarly, the attitudes and problems of the investor must influence and change the corporation. Basically, the rate of return to the securities investor represents the cost of the funds to the corporation. Then, also, the nature and direction of our thinking in regard to corporate financial problems are sure to have an important impact upon the policies and work of the corporation.

We turn first to the point of view of the investor. Two basic questions arise:

1. How do we compute the value of a security, especially a bond, and how are we to figure the return or yield to the investor?

2. What are the various ways of protecting the interest of the investor?

In answer to the first of these questions, let us consider some elementary mathematical concepts in regard to a bond investment.

The problem. Mr. Smith buys a bond bearing an annual coupon rate of 5 percent, interest payable annually. The bond is quoted at 100—that is, 100 percent of par value. Mr. Smith, therefore, pays $1000 for a $1000-par bond. He makes the purchase on July 1, 1947, and the bond has five years to run. What is the essential nature of Mr. Smith's investment?

Mr. Smith has really purchased two legal rights: (1) a right to $50 interest at the end of each year for five years; (2) a right to the return of the $1000 principal on July 1, 1952. Since the company is to repay $1000, or exactly the amount that Smith paid for the bond, the interest actually received each year becomes the gross compensation to him for allowing someone else to use his funds. Mr. Smith could have used or consumed the $1000 himself, but instead he turned it over to another. If Mr. Smith bought the bond on the market, the recipient of the funds was the seller; if he purchased the bond at the time of its issuance, the recipient was the issuing corporation.

The annual return of $50 to Mr. Smith really covers four items: time preference, liquidity preference, risk, costs of administration.

1. *Time preference.* Present wants are more urgent to many people than future wants. Mr. Smith postpones his use or consumption of $1000 worth of goods and services until five years from now. The payment for this postponement does not depend upon Mr. Smith's personal or specific preference for the present over the future, but upon that of the marginal saver—that is, of the person whose sav-

ings will barely be made at the current rate of interest and whose savings will be necessary to satisfy the demands of the borrowers for present funds.

2. *Liquidity preference.* By giving up his ready money in exchange for the bond, Mr. Smith has made his personal financial situation less liquid. Many people prefer to keep cash on hand or in the bank for emergencies or for taking advantage of bargains as they appear. Some compensation has to be made for this loss of immediate availability of the funds. Reimbursement will also have to be made for this sacrifice of liquidity. Here again we refer to the degree or intensity of this preference to the marginal investor.

The total of items 1 and 2 represent the true or net interest.* Illustrations of this are interest on United States treasury certificates of indebtedness (1 percent), call loan notes (1 percent), and the return on savings deposits in banks (around 1 percent). These are all short-term commitments with practically no risk and little cost of administration.

3. *Risk.* There is always a possibility that the principal will not be returned or that even the interest will not be paid. The borrower may become unwilling or unable to pay. The attitude and facilities of government for compelling payment may become weak. Even

* Some economists maintain that the existence of time preference cannot be proved and that adequate savings might be made if there were no interest at all, or even negative interest. The great bulk of savings, these economists point out, are made by the well-to-do and the rich who could not spend all their income for consumers goods. Moerover, the lower the interest rate the larger will be the stock of savings necessary to build up a specific future income, the higher the interest rate the smaller will be the necessary fund. These economists argue that it is the *productivity* of the capital represented by the borrowed funds to the marginal user that forms the basis for the true or net interest rate. The users of the time preference concept contend, on their side, that, though the statements just referred to are undoubtedly true, nevertheless the savings of the poorer sections of our population, even if they constitute only a small proportion of the total, are necessary to satisfy the total demand for funds. To these poorer classes time preference is important. The bugaboo of the economic theorist in this connection is the status of corporate savings, which are made with little reference, if any, to time preference. The reader will find a concise summary of some of the arguments for and against the time preference concept in Cecil Kenneth Brown, *Introduction to Economics,* American Book Co., 1941, Ch. VIII.

For a penetrating, though somewhat ironical, statement of the cleavage among economists as to the effect of interest on savings and investment, see Donald B. Woodward, "The Public Debt and Institutions," *American Economic Review,* Papers and Proceedings, Vol. XXXVII (May 1947), pp. 156-83, especially pp. 178-81. For a historical treatment see Edmund Whittaker, *A History of Economic Ideas,* Longmans, Green & Co., 1940, pp. 541-57.

though interest and principal are "safe," the general level of prices may rise between the time of the making of the loan and the payment of interest or principal. This fall in the purchasing power of the dollar constitutes a serious risk to any investor in fixed-income securities.

4. *Costs of administration.* All investments involve some worry and some expenditures for investigation, commissions, and collection. There may also be some loss of interest during the process of reinvestment.

The sum of items 1, 2, 3, and 4 constitutes the gross interest. In our simple illustration the 5 percent received by Mr. Smith is his gross interest. It is also the effective rate of return on his loan.

But the objection will be made that the bonds in question will rarely sell at exactly 100. This point is well taken. The bond is likely to sell below or above 100, depending upon numerous circumstances. Let us assume, for instance, that the typical possessor of funds requires 6 percent to be induced to invest in that industry or in that company—that is, that the current market rate or gross interest rate is 6 percent. The coupon rate on the bond, however, is 5 percent. There is now a discrepancy between the market interest rate and the rate specified in the bond. The price of the bond on the market cannot now be par. Will it be greater than or smaller than 100?

In purchasing this bond, Mr. Smith gets a legal right to $50 interest at the end of the first year, a second such payment at the end of the second year, a third at the end of the third year, a fourth at the end of the fourth year, and a fifth at the end of the fifth year. The principal of $1000 will also be due at the end of the fifth year. Mr. Smith is to remit at the present time for all these future payments. It follows that, to become the owner of the bond, he will have to pay the total of these present values.

Present value of interest and principal. The $50 interest to be paid to Mr. Smith at the end of the first year is worth less than $50 now. Remember that we have assumed the market or current rate of interest necessary to draw funds into that company and that industry to be 6 percent. The first interest installment of $50 is, accordingly, worth $50 divided by 1.06, or $\frac{\$50}{1.06}$, or $47.17. If you reverse the process, you will note that $47.17 at the present time will at 6 percent interest amount to $50 at the end of one year.

The second interest payment is worth at the present time \$50 divided by $(1.06)^2$ or $\frac{\$50}{(1.06)^2}$ or \$44.50. It will be remembered that $\frac{\$50}{1.06}$ equaled \$47.17. In turn, $\frac{\$47.17}{1.06}$ equals \$44.50. Another way of putting this idea is

$$\frac{\$50}{1.06 \times 1.06} = \frac{\$50}{1.1236} = \$44.50.$$

Turning this around, one notes that \$44.50 at 6 percent will at the end of one year give \$47.17, and in turn, \$47.17 at 6 percent will give \$50. The third interest payment is worth at the present time

$$\frac{\$50}{(1.06)^3}, \text{ or } \frac{\$50}{1.06 \times 1.06 \times 1.06} \text{ or } \$41.98;$$

the fourth is worth at the present time

$$\frac{\$50}{(1.06)^4} \text{ or } \$39.60;$$

and the fifth is worth

$$\frac{\$50}{(1.06)^5} \text{ or } \$37.36.$$

This process may be carried on for any number (n) of interest payments.

By purchasing the bond in our illustration, our investor is buying at the present time an annuity of \$50 for five years or five future payments of \$50 each, due at the end of each successive year. The present values of these five future payments total \$47.17 + \$44.50 + \$41.98 + \$39.60 + \$37.36 or \$210.61. The legal right to demand and to receive all of these, one by one, in the future as they fall due is bought by Mr. Smith today for \$210.61.

Market price of bonds. The principal of \$1000 is to be repaid on the due date, that is, at the end of five years. Its present value is, therefore,

$$\frac{\$1000}{(1.06)^5}.$$

Since the present value of \$50 due at the end of five years is, according to our previous computation, \$37.36, the present value of \$1000, or twenty times \$50, due at the end of five years, is twenty times

\$37.36, or \$747.20.* The total present value of the five interest payments and of the principal is, therefore, \$747.20 + \$210.61 or \$957.81. This is the theoretical or mathematical market value of this bond.† Such bond selling below 100, that is, below \$1000 for a \$1000-par denomination, is known as a discount bond. (We are referring to *market* bonds, either corporate or government, not to war savings bonds, such as E bonds. An E bond is not a discount bond. It cannot possibly under our present laws be worth less than 100 percent of the purchase price.)

By a similar process of reasoning, if the coupon rate were 5 percent and the market or actual rate for the industry and for the company were, say, 4 percent, the bond would sell at a figure greater than par (\$1044.52). In this computation the \$50 interest is divided by 1.04, by $(1.04)^2$, etc., and the principal of \$1000 is divided by $(1.04)^5$. If the interest were payable semiannually, the interest payment would be \$25, and the present values would be \$25 divided by 1.02, by $(1.02)^2$, etc., and the principal of \$1000 would be divided by $(1.02)^{10}$.

Computation of yield. Let us now look at a bond purchase from a different point of view. Say that Mr. Smith on July 1, 1947, pays 90 (\$900) for a bond with a 5-percent coupon rate having twenty years yet to run, and that interest is payable semiannually on July 1 and on January 1. The discount, it will be noted, is \$100. In this case there will be forty semiannual interest payments. Instead of computing a market price, we are now starting with the price which

* According to four-place tables, this figure is \$747.25.

† If one designates the amount of interest for each period by I and the rate of interest for each period by r and additional periods for which a similar computation is to be made by n, the formula will be:

Present value of interest payments equals

$$\frac{I}{1+r}+\frac{I}{(1+r)^2}+\frac{I}{(1+r)^3}+\frac{I}{(1+r)^4}+\frac{I}{(1+r)^5}+\frac{I}{(1+r)^n}.$$

The present value of the principal, P, equals

$$\frac{P}{(1+r)^n}.$$

In the mathematical formulas, the n refers to the total number of periods. In any problem of this kind, if the interest is payable semiannually, as is usually the case, the interest payment per period would be one half of the annual coupon rate, or \$25 in our illustration. The number of periods would be 10, and the market rate would be one half of that specified for the year, that is one half of 6 percent, or 3 percent. The present value of \$25 to be paid at the end of six months would be $\frac{\$25}{1.03}$. It should be noted that in the formulas above, the denominator is *one* plus the rate of interest for the period to the appropriate power.

Mr. Smith has to pay in order to get the bond. Our task now is to compute the effective rate of return, or the yield to maturity, which Mr. Smith will receive on the basis of the given purchase price of 90, or $900.

Mr. Smith's essential rights are the same as in our earlier illustration: namely, to receive the interest payments as they fall due and to collect the principal at the end of the fortieth semiannual period. Though he paid only $900, it is clear that as the forty half-year periods pass by, the theoretical or mathematical value of his bond will steadily increase from $900 at the time of the purchase to exactly $1000 on the date of maturity. He will not receive this "accumulation" of $100 until the due date, that is, June 30, 1967. He will, of course, receive interest of $25 on each interest date, which is July 1 and January 1.

One feels tempted to say that the investor receives his interest of $25 plus $2.50 accumulation—that is, $1/40$ of the discount of $100—or $27.50 each half year. This is not strictly true, of course, since he does not receive the extra $2.50 each six months, but has to wait until June 30, 1967. This approximate concept of the situation, however, has led to the calculation of yield to maturity by various rough but fairly workable methods. One of these will be described.

In our illustration, the semiannual interest payment is $25. The annual accumulation by the "straight-line method" (that is, the same amount each half year) is $100 divided by 40 or $2.50. The total of interest and accumulation is $27.50. Now divide the purchase price of $900 (that is, the value of the bond at the beginning) into $27.50. The result is 3.055 percent or the yield for a six-month period. This figure for the yield is too high, since the computation allows for the receipt of the accumulation too early. The total accumulation of $100, it will be recalled, is to be paid at the maturity date, since at that time $1000 will be paid by the company.

Now advance the computation up to the beginning of the last six-month period before maturity. At that time, by this method of equal annual accumulations, the bond will be worth $997.50. All the semiannual increments will have been allowed except the fortieth. Divide this $997.50 into $27.50, and the answer is 2.756 percent for a six-month period, a percentage which is roughly as much too low as the first figure of 3.055 was too high. The approximate yield would have been that figured for the halfway period. This can be found by averaging 3.055 and 2.756, the result being 2.9055 percent

for a six-month period, or 5.811 percent for a year. It is not necessary in this computation to average and multiply by two. Adding the two figures will give the same result.

The reasonably exact yield to maturity as computed from bond tables is 5.855 percent. Since the approximate figure arrived at was 5.811, it appears that for a discount bond this method gives a yield which is somewhat too low.

Now, assume that the same bond was bought at a premium, for instance, 110. The investor in this case receives $25 each half-year period, but each six months the value of the bond falls until at the end of the fortieth period it is only $1000. The total fall in value, or the "amortization" over the entire term, is $100. By the rough straight-line method this decrease is $2.50 per period. The rough yield the first period is $1100 divided into $22.50 or 2.045 percent, which is too low, since we immediately took off the decrease of $2.50 though this is not actually done until maturity. At the beginning of the fortieth period, the yield is $1002.50 divided into $22.50, or 2.244 percent. This is a little too high. A more accurate figure would have been obtained by dividing the value at the middle of the term into $22.50. This may be approximately obtained by adding 2.045 and 2.244, which gives 4.289 percent. The reasonably exact figures as derived from bond tables is 4.253. For a premium bond this approximate method of computation gives a yield to maturity which is a little too high.*

* Another short-cut or approximate method sometimes used is based upon the following formula:

$$\text{Yield for the period} = \frac{2(rn + d)}{n(2 - d) - d}$$

for a discount bond in which r = coupon rate per period, n = number of coupons or interest periods, d = the percent of discount.

Substituting figures for our discount bond:

$$\text{Yield for period} = \frac{2(.025 \times 40 + .10)}{40(2 - .10) - .10} = \frac{2.20}{75.90} = 2.899\% \text{ or } 5.798 \text{ for the year.}$$

For a premium bond the formula is

$$\text{Yield for period} = \frac{2(rn - p)}{n(2 + p) + p}$$

The item p is the percent of premium. All the other symbols are the same as in the discount formula. Substituting:

$$\text{Yield for period} = \frac{2(.025 \times 40 - .10)}{40(2 + .10) + .10} = \frac{1.80}{84.10} = 2.129\% \text{ or } 4.258 \text{ for a year.}$$

Use of bond tables. The investor does not have to rely on these approximate methods if he has access to bond tables. Numerous bond tables are available, some of the most common being those by Montgomery Rollins, David C. Johnson, and Charles E. Sprague. The variables in tables of this kind are the coupon rate, years to maturity, market price, and the percent of yield. The items may be arranged in numerous ways or systems. Thus, Johnson's table gives on the "5 percent" page under 20 years the following prices and yields, interest payable semiannually.

Price	Yield
$109\frac{1}{2}$	.. 4.288−
110.	. 4.253−
111..	. 4.183−
. . . .	. . . . . .
90	5.855
$90\frac{1}{2}$...	5.809

Rollins' table gives on the 20-year page the following (excerpt) figures, interest payable semiannually.

Yield for year	Price of bond if coupon rate is	
	5%	4.5%
4.25. . .	110.04	103.35
4.30.. . .	109.33	102.66
4.375 ...	108.27	101.65
4.50 . .	106.55	100.00
4.60	105.19	98.70
. . . . . .	. . . . . .	. . . . . .
5.625........	92.55	86.59
5.75...... . .	91.15	85.26
5.875...... . .	89.78	83.95
6.00.........	88.44	82.66

Since the price is not always at the even dollar or half dollar, but often falls on intermediate eighths, it is frequently necessary to interpolate. Suppose a bond sells at 90.25 or $90\frac{1}{4}$. This is halfway be-

tween 90 and 90½. The yield at price of 90 is 5.855, at 90½ it is 5.809. The spread from 5.855 down to 5.809 is .046. One half of this is .023. The yield, if the price is 90¼, is, therefore, 5.832, that is, 5.809 + .023. While such interpolation is reasonably accurate, it is subject to some error, since the steps within the interval are mathematically not equal. Some of the tables have finer grouping or smaller class intervals, so as to reduce the errors involved in such interpolation.

Similar interpolations may be made for any of the variables. The life of a 5-percent bond selling at 90, for instance, may be 13 years, 4½ months from the date of the purchase. If the bond tables give figures only for the whole years, it would be necessary in this case to interpolate between the figures for 13 and those for 14 years. If the tables give figures by the half years one will have to interpolate between 13 and 13½ years.

Desirability of computing book value of a bond. The small investor usually keeps his records on a purely cash basis—that is, he considers the "interest" when received for a period as that much income. Trustees and institutional investors, however, often find it advantageous and even necessary, when receiving an interest check, to distinguish between amount of income and the amount of adjustment in the book value of the bond. A trustee, for example, receives the income from a long-term bond for the immediate and life benefit of *A*, but at *A*'s death the ownership of the bond is to go to *B*. In this case *A* is a "life tenant," *B* is a "remainderman." The bond has a value, say, of 110—that is, $1100—at the beginning of the life tenancy. It has twenty years to run. The coupon rate is 5 percent, payable semiannually. The life tenant dies at the end of ten years, and, according to the terms of the trust, the remainderman becomes the owner. If the entire $25 cash interest payment for a period is turned over each time to the life tenant, the remainderman will get the short end of the deal, since when he takes possession the bond will have fallen in value without his receiving any corresponding compensating payment. In the case of the discount bond, on the other hand, if just the $25 is turned over to the life tenant for each period, the remainderman gets the advantage.

Institutional investors, such as insurance companies and banks, may account for the portion of the interest receipts which are really amortization in the case of premium bonds or make additional allow-

ance for accumulation in the case of a discount bond. The treatment will also affect the amount of income subject to taxes. The financial situation and market interest rates may change at any time, and the actual value of the bond on the market may vary widely from the book value as determined from our tables. If the bond is sold subsequently, the investor may receive more or less than the theoretical value on his books, which was computed on the basis of his own individual purchase price.

In the interest of simplicity and economy of time, even with a sacrifice of accuracy, some accountants recommend a simple "straight-line method" of amortizing the premium or of accumulating the discount. By this method the semiannual subtraction or addition in our illustration would be $2.50.* We will here, however, describe the more accurate mathematical method of figuring the book value of the bond from period to period.

Let us refer, for instance, to the discount bond. The price and value at the time of purchase was $900. Since we have already determined the reasonably exact annual yield according to the bond tables to be 5.855 percent, the return to the investor the first six months can be considered to be 2.9275 (one half of 5.855) percent of $900 or almost $26.35. But the investor receives cash of only $25. The difference, or $1.35, represents an accumulation or addition to the book value of the bond. At the beginning of the second period the book value of the bond is, therefore, $901.35. This new value at a rate of 2.9275 gives $26.39, which is $1.39 in excess of the cash received. When this $1.39 is added to the book value at the end of the first period, the result is $902.74. This becomes the book value at the end of the second period. Thus the process may be continued, giving the results shown in the accompanying table. Mathematically, the book value at the end of forty periods is $1000, or par, the amount that must be repaid by the corporation.

* In this "straight-line method" the income to the investor in our discount bond will become $27.50 ($25.00 cash plus $2.50 accumulation) each half year. For the premium bond the income for each period will be $22.50 ($25 minus $2.50). The greatest theoretical disadvantage of this short-cut method is the fact that it does not allow for the same yield from period to period. Since the amount of accumulation or amortization is made constant, the yield or effective rate of return must vary. Mathematically, if the yield is maintained at the same level, the absolute amount of periodic amortization or accumulation must change.

Bond value beginning of period	"Interest" received during the six-month period	Interest on bond value at 5.855 per-cent per year (2.9275 for half year)	Accumu-lation	Book value at end of period
$900.00	$25	$26.35	$1.35	$901.35
901.35	25	26.39	1.39	902.74
902.74	25	26.43	1.43	904.17
904.17	25	26.47	1.47	905.64
905.64	25	26.51	1.51	907.15
907.15	25	26.56	1.56	908.71
908.71	25	26.60	1.60	910.31
910.31	25	26.65	1.65	911.96
911.96	25	26.70	1.70	913.66
913.66	25	26.75	1.75	915.41
915.41	25	26.80	1.80	917.21
917.21	25	26.85	1.85	919.06
919.06	25	26.91	1.91	920.97
920.97	25	26.96	1.96	922.93
922.93	25	27.02	2.02	924.95
924.95	25	27.08	2.08	927.03
927.03	25	27.14	2.14	929.17
929.17	25	27.20	2.20	931.37
931.37	25	27.27	2.27	933.64
933.64	25	27.33	2.33	935.97
935.97	25	27.40	2.40	938.37
938.37	25	27.47	2.47	940.84
940.84	25	27.54	2.54	943.38
943.38	25	27.62	2.62	946.00
946.00	25	27.69	2.69	948.69
948.69	25	27.77	2.77	951.46
951.46	25	27.85	2.85	954.31
954.31	25	27.94	2.94	957.25
957.25	25	28.02	3.02	960.27
960.27	25	28.11	3.11	963.38
963.38	25	28.20	3.20	966.58
966.58	25	28.30	3.30	969.88
969.88	25	28.39	3.39	973.27
973.27	25	28.49	3.49	976.76
976.76	25	28.59	3.59	980.35
980.35	25	28.70	3.70	984.05
984.05	25	28.81	3.81	987.86
987.86	25	28.92	3.92	991.78
991.78	25	29.03	4.03	995.81
995.81	25	29.15	4.15	999.96 *

* The final total should be $1000. The discrepancy of 4¢ is explained by the fact that all the computations are made to only two places. In actual practice, no matter how many places are figured, the final result will rarely, if ever, equal exactly $1000, though four places will bring the results much closer than the two in our illustration.

Thus, when the investor receives the first interest payment of $25, strictly speaking his income may be said to be credited with $26.35. The $1.35 can be charged—that is, added—to the value of his investment. The $25 is charged to cash.

The procedure in the case of the premium bond is essentially the same, except that the premium is amortized—that is, reduced—by the specific amounts until the value of $1000 is reached. Since the exact yield on our premium bond is 4.252 (it is a little more than 4.252 and a little less than 4.253) and since the purchase price was $1100, the income to the investor for the first six-month period is 2.126 percent of $1100, or $23.39. The investor debits cash with $25, but credits income with only $23.39. The remaining credit of $1.61 is made to the value of his investment—that is, the $1.61 is subtracted from the $1100.

Since the yield to maturity to an investor is dependent upon the price at which the bond was bought, the same bond issue may, of course, carry different yields to different investors. Mr. Smith paid 90. His yield to maturity is 5.855 percent. A year later, money and business conditions may be considerably changed, and the price of the bond may have risen to 105. The yield to anyone buying the bond at that price is about 4.6 percent. But it is the same bond with only nineteen years to run. Similarly, the twenty-five-year 5-percent bonds issued by Cleanbright Toothpaste Company may sell for 110, while the twenty-year 5-percent bonds of Sweetbite, Incorporated, may sell at 90. The fifteen-year 5-percent bonds of Everlast Pencil Corp. could sell at 103¾ to yield 4.65 percent, while the twenty-year 6-percent bonds of Write-well, Ltd., may sell at 92½ to yield almost 6.7 percent, and the thirty-year first-mortgage 6-percent bonds of Fadeaway Company may be selling at 46.*

The call feature and the price of a bond. The presence of the call feature may influence the yield. Assume a twenty-year bond to have a coupon rate of 6 percent, interest payable semiannually. If the current market interest rate in the industry and for this type of company were only 4 percent, the price of the bond should be a little over 127 ($1273.62). Now assume the bonds are callable at 105. The theoretical market price would be so far above the call price that the purchaser might be unwilling to pay it. The calling of the bond would subject him to a substantial loss. The market price of this bond might rise only a few points above the call price of 105. In all probability this bond would soon be called. The company could probably refinance at a rate of 4 percent.

* There is a probability that Fadeaway may not be paying its interest. Interest-paying bonds sell on the market at their price plus the interest which has accrued since the last interest date up to the time of the purchase. But bonds of corporations which have defaulted on the interest sell "flat," that is, the price includes the bond and any and all interest if and when it is paid.

The concept of current yield. The computation of the yield on stock is quite simple compared to that for bonds. Stocks represent a proprietary interest. There is no legal promise to pay dividends. There is no principal to be returned to the investor. Generally the only way in which a stockholder can realize on his stock is to sell it. The holder of a share of stock may be considered as receiving a yield computed by dividing the annual rate of regular dividend by the purchase price. If the cost of a share of stock to the investor is $150 and the reasonably anticipated rate of dividend is $5, the yield is $5 divided by $150, or 3.33 percent. The yield on a perpetual bond—that is, a bond having no maturity date—is similarly computed by dividing the purchase price into the rate of interest.

Some writers point out that, strictly, it is not proper to use the term "yield" in the case of stock. The holder of stock is interested fundamentally in the current dividend rate and in the probable selling price of the stock, not in the income over a long period of time. This is also true to some extent of preferred stock. If the preferred stock is callable, however, it may be advisable to assume that the stock will be redeemed at some specific time and to calculate its yield in the same way as for bonds. The assumed call date would correspond to the maturity date of a bond, and the call price would serve the same functions as the par value.*

The holder of a bond may be interested merely in the "current yield"—that is, the simple rate computed by dividing the coupon rate by the purchase price of the bond. If an investor buys a long-term bond which he expects to resell after a year or two, he will find it to his advantage simply to compute the current yield. Assume he pays $900 for a 5-percent bond having fifty years to run. The current yield or current income is $50 ÷ $900 or about 5.56 percent. Current yield is a convenient term and is frequently used in financial circles. Any such current income or current yield may, of course, easily be wiped out or augmented by wide fluctuations in the bond price between the time of purchase and the time of sale.

Conclusions. The principal factors affecting the standing and the price of a stock or bond are the condition of the money market and the reasonably anticipated future earnings of the issuing company. Primary emphasis is, of course, placed on the steadiness of these probable earnings. All of these circumstances affecting the company are a reflection of the quality of the management, the numerous con-

* See Appendix L for yield on various types of securities, including 200 common stocks.

ditions characterizing the demand and supply of the product, and the condition and trends of general business.

Though these are the basic considerations, investors have often demanded, and corporations have written into the security contracts, a large variety of concessions and protective provisions. Though these have been referred to at various times in these pages, we shall in the next two chapters analyze their fair-weather nature and show how in the past they have often been of little practical value.

Summary. The holder of a bond has two rights: (1) a right to the agreed rate of interest to be paid at the end of each period, and (2) a right to the return of the principal at the maturity of the bond. The theoretical market value of a bond at any time is the total present value of these future payments. If the market or current rate of interest necessary to draw capital into the company which has issued the bond is the same as the coupon rate, the market price will be 100—that is, 100 percent of par, or $1000 for a $1000-par bond. If, on the other hand, the current interest is different from the coupon rate, the market price of the bond will pull away from par. If the current interest rate is 6 percent, for instance, while the coupon rate of a bond having twenty years to run, with interest payable semiannually, is only 5 percent, this bond will sell at a discount, at 88.44, or probably 88½ or $885 for a $1000-par bond.

Institutional investors, such as trustees and insurance companies, often keep an exact record of the "book value" of their bond investments. This value is determined by subtracting from the purchase price or adding to it an amount to take care of the amortization or accumulation period by period. If such investor receives an interest check on a bond bought at a premium, for instance, he will distinguish between the portion which represents income and that which represents a decrease in the value of his investment. This differentiation is particularly necessary where there is a life estate and a remainderman, but banks and insurance companies also find it important to keep a record of such increase or decrease in the values of their bonds.

The term "yield" may mean either of two things. In the more scientific usage it stands for "yield to maturity." This is computed by means of formulas and bond tables and even by certain short-cut and approximate methods. It is often just called "yield" or "effective return." The common use of the term is in the sense of "current yield." This is calculated by merely dividing the price paid into the annual coupon rate. Investors, even some who are institutional in-

vestors, who buy a very long-term bond with the intention of holding it only a short time, may compute the yield or return on their money this way. For stocks, which have no due date, this is the common method of computing yield, but the return on callable preferred shares is often determined in the same way as the yield to maturity, under the assumption that the earliest call date is the maturity date. In the case of callable bonds, it is appropriate at times to compute the yield to maturity on the basis of the earliest call date rather than the date of maturity.

PROBLEMS

1. A $1000-par bond carrying a semiannual coupon rate of 2 percent, or 4 percent per year, has five years to run. The market or current rate of interest for a comparable risk is 3 percent. What will be the present value—that is, the market price—of this bond?

2. What effect would a rising rate of current or market interest rates tend to have upon the prices of long-term United States bonds now outstanding?

3. The Indianapolis Power and Light first mortgage 3¼s due on May 1, 1970, sold in October 1947 at 106.5. Compute the yield by a short-cut method and also by a bond table.

The Atchison, Topeka, and Sante Fe general 4s of 1995 sold at 122. What was the yield? For exact due date, see Appendix D.

4. Which holders of bonds are normally interested in keeping a record of their "book values"?

5. We have seen that the market value of a bond is the sum of the present or discounted values of each of the interest payments and of the principal.

Using the idea of discount and present value, make a statement to describe the market value of a share of common stock.

Chapter 20

Protective Provisions in Stock Contracts

Introduction. Safeguards for the holders of preferred stock and unsecured bonds * may take the form of quantitative tests of net income or may require certain relations among specified accounts on the balance sheet and the profit and loss statement. The adequacy or effectiveness of these safeguards naturally depends to some extent on accounting accuracy. In the preparation of both profit and loss accounts and the balance sheet, matters of judgment, differences in accounting philosophy, and downright manipulation and fraud may have to be taken into consideration.

The accusation has often been made—undoubtedly with some element of truth—that the net income of a company depends on the purpose for which the financial statements are made and for whom they are intended. Through the insistence of such federal agencies as the Securities and Exchange Commission, Interstate Commerce Commission, Federal Power Commission, and war-contract negotiation and price-fixing authorities, and through various state public-utility regulatory bodies, corporations have had to eliminate the weaknesses and possibilities for irregularities in bookkeeping by adopting fairly uniform accounting procedures. The scrutiny of tax returns by the Commissioner of Internal Revenue, the increasing watchfulness of the securities exchanges, and the growing sense of responsibility of such professional organizations as the American Institute of Accountants, also have had constructive effects.

But value is a matter of opinion. Human flesh is weak; financial

* This chapter discusses mainly the protective provisions for preferred stocks and for income bonds (in many ways, really a preferred stock). Occasionally, however, reference will be made to bond contracts. Chapter 21 is devoted more specifically to protective provisions for bonds as found chiefly in the trust indenture.

subterfuge remains with us; and the end result of the accounting process—the amount of net income—is still a mere estimate and an approximation.

Methods of accounting manipulation. The apparent net income of a company may change with the purpose to be accomplished. Though income is computed by the use of "symbols of certainty," the final result may be uncertainty. The company at one time may wish to show a low net income, or, this purpose accomplished, may wish to improve its showing. As a result, the standing of such securities as preferred stock and income bonds may be peculiarly dependent on the point of view of the management. As an investor, you may have trouble determining the management's private point of view, but you can discover much about the standing of its securities if you learn to read its financial statements with a sharp eye.

Let us refer to the following simplified profit and loss statement of a trading concern:

Net sales (gross sales minus various allowances, discounts and returns)		$10,000	
Inventory of goods at the beginning of the period	$4,000		
Purchases during the period	5,000		
Total carried over from the preceding period and bought during this period	$9,000		
Inventory at the end of the period	4,000		
Total inventory disposed of (cost of sales or cost of goods sold)		5,000	
Gross income			$5,000
Expenses of all kinds, including depreciation of buildings, equipment, and machinery, also all taxes			4,500
Net income available for stockholders (There are no bonds outstanding in our illustration)			$ 500

In the construction of this statement there were numerous decisions which affected the amount of the net income available for dividends. Let us assume that the company, whatever its motive, wishes to understate its net income. There are three general ways in which this can be done: (1) by keeping down the net sales; (2) by keeping up the cost of sales; (3) by keeping up the expenses.

The first two methods are rather dubious accounting procedures, but theoretically they are possible. By "keeping down the net sales,"

we do not mean the reduction of the scale of operations. We have reference, rather, to tricks whereby the company may create the impression that its sales are less than what they actually are. The company could, for instance, dispose of $1000 (selling value) worth of goods and not credit this amount to sales until a later period.* On the assumption that the company keeps these goods on its own books at their cost price—50 percent of the selling price—and that the expenses remain unchanged, the resulting profit and loss figures, as differing from our original statement, are shown in Column 1 of the table which follows.

Item	Original statement	1	2	3	4	5	6
Net sales....	$10,000	$9,000	$10,000	$10,000	$10,000	$10,000	$10,000
Inventory at beginning .	4,000	4,000	4,000	4,000	4,000	4,000	4,000
Purchases......	5,000	5,000	6,000	5,000	5,000	5,000	5,000
Total inventory at beginning plus purchases .	9,000	9,000*	10,000	9,000	9,000	9,000	9,000
Inventory at end	4,000	4,500	4,000	3,500	4,000	4,000	4,000
Cost of sales ...	5,000	4,500	6,000	5,500	5,000	5,000	5,000
Gross income .	5,000	4,500	4,000	4,500	5,000	5,000	5,000
Expenses .	4,500	4,500	4,500	4,500	5,000	5,500	5,000
Net income .	500		Loss 500			Loss 500	

* This inventory figure assumes that the $1000 worth of goods (selling price) which have really been sold are still kept in the inventory at the purchase price.

As a way of increasing the cost of sales the company could charge itself with purchases when it has received neither the goods nor the title to them. Let us say that it orders $1000 worth of goods and considers them immediately as a purchase, but does not include such goods in the inventory. The changes from our original statement are shown in Column 2.

A method of stepping up cost of sales, which is more realistic from the accounting point of view, involves the undervaluation of the inventory held at the end of the period. Let us assume that the inventory at the end of the period is valued at $3500 instead of $4000. This represents an undervaluation of $500. The profit and loss statement would in this case stand as in Column 3.

The padding of expense accounts is frequently used, and, though

* The accounting procedure for this type of subterfuge would be rather difficult. If the cash or account receivable is to be recognized on the books, there would have to be a corresponding credit. If such credit is not to sales, some other account, perhaps a deferred income account, might be brought into use.

it is generally not justified or to be recommended, it is more plausible from the point of view of accounting procedure than most of the devices under the first two methods. The company could, for instance, have made a higher depreciation charge for the period than was included in our original figures. Let us say that such charge in the original statement was $250 but that, instead, the accountants had made it $750. The profit and loss statement appears in Column 4.

Or the accountants could have charged a capital expenditure to an expense account. Let us say that the company builds a warehouse worth $1000. This is really an investment, a mere reshuffling of the assets. It is not an expense. Instead of debiting or charging this $1000 building to the appropriate asset account, however, the company adds this item to an expense account. If this were done, the statement would be as in 5.

Finally, to take just one more illustration, let us say that one of the machines worth $600 according to the books is suddenly destroyed without insurance or that some revolutionary invention renders it useless for its purpose and that it has a salvage or scrap value of only $100. The loss is $500. If this loss is unusual and nonrecurring, which is probably the case, it should be debited to—that is, taken out of—the general surplus. Sometimes, however, the accountants may be asked to add it to expense. If this is done, the financial statement will stand as in 6.

You have probably concluded that most of these expedients or manipulations are bad, though some of them may be defended as erring on the side of conservatism. Number 1 certainly represents dishonest practice. Furthermore, unless the company wishes to continue with this manipulation, it will be caught with a higher income in the next period. Number 2 is also sheer deceit. Number 3 represents opinion and may or may not be justified.* In subsequent

* During the early part of World War II, when raw material prices were rising rapidly, a number of companies, with the permission of the Commissioner of Internal Revenue, adopted the last-in first-out (LIFO) method of evaluating inventory on hand, instead of the customary first-in first-out system. As long as prices are rising, and as long as the company has a substantial stock of goods on hand, the LIFO system keeps the value of the inventory at the end lower than it would have been under the more common method. After adopting the LIFO method the company can shift back to the first-in first-out method only with the consent of the Commissioner.

When a company buys raw materials and other inventories, it places them, as it were, layer after layer in a barrel, one on top of the other as they are

periods these misstatements or undervaluations will also "catch up" on the books.

The depreciation figures in Column 4 are a matter of opinion. The rate of depreciation is always controversial. The making of large allowances is frequently defended as conservative accounting. If a building is depreciated at 5 percent annually on a straight-line method, one half of its value will remain on the books at the end of ten years. If, instead, the rate were 10 percent, the building would be completely depreciated at the end of such time, but actually, if the rate should more properly have been only 5 percent, it will be only half depreciated. The company would now own a valuable building which on its books has no value. The charging of an excess depreciation rate, in effect, has created a secret reserve.

This procedure may prove to be a boomerang, however, because, under the 10-percent rate, the accountants cannot make any legitimate depreciation charge after the tenth year. Thus, though the expenses over the ten years have been overstated and the net income understated, beginning the eleventh year the net income will tend to be increased. This device has, in effect, reduced the income in the current years in favor of the future. And meanwhile the stockholders may have yearned for dividends, or interest may have been passed on income bonds.

The practice illustrated in Column 5 was one of the most vicious ever engaged in by corporations wanting to squeeze out preferred stock or discriminate against income bonds or even helpless groups of common stockholders. As we have already seen, dividends on preferred stock do not have to be paid, even if there is adequate income for the purpose, if the management in good faith decides to retain

purchased. When the company sells goods under the first-in first-out method, it may be said to take them from the bottom of the barrel.

In a time of steadily rising prices this leaves the higher priced inventory at the top. Thus, the inventory at the end of the period will be relatively high. The first-in first-out method will, therefore, tend to minimize the cost of sales and correspondingly to maximize the profits.

Under the LIFO system, on the other hand, the company is assumed to sell goods off the top of the barrel, so to speak, leaving the lower-priced goods on hand at the bottom. Since we assumed rising prices, the goods at the bottom were bought at a comparatively low price. Thus the value of the inventory at the end will be low, and the profits will tend to be kept down. Some companies ran into difficulties with the use of this method, since shortages and rationing caused them to "scrape the bottom," thus leaving higher-priced inventory in stock at the end. If this "scraping of the bottom" occurred because of forces beyond the control of the corporation, the law allowed certain forms of relief.

the earnings in the corporation. When earnings are not adequate, however, the directors have an even stronger talking point for refusing to pay a dividend. If the directors are looking for an "excuse," they sometimes find it convenient arbitrarily to reduce the income available for dividends. The practices described under 5 and to some extent that under 4 furnished these pretexts. The holder of income bonds sometimes suffered a similar fate. Generally the interest on income bonds is to be paid only if earned, and, if not earned, the bondholders have no claim for that year.*

Controlling stockholders have been known to squeeze out the minority by padding expenses. They sometimes "took care of" themselves by placing themselves and relatives on the pay roll at high salaries. Often the minority, neither receiving any dividends nor holding lucrative jobs, would give up in disgust and sell their stock, probably to the majority. In situations of this kind bad faith may be extremely difficult to prove.

The federal tax authorities frown upon most of these practices. Methods 1, 2, 3, and 5 would probably be considered either illegal or unjustifiable under the income tax. In regard to 4, if there is strong, legitimate argument for raising the depreciation charge to $750, the increase may be allowed, but in our illustration the purpose of the increase was not to recognize some reasonable change in the actual rate of depreciation, but rather to reduce the net income arbitrarily. The loss in method 6 has occurred without insurance or any corresponding remuneration, and it will be allowed as a deductible item. Good accounting practice still points to the conclusion, however, that if such loss is nonrecurring it should be charged to surplus or to some surplus reserve account rather than to expense. In regard to 3, it may be stated that if the loss in inventory values actually occurred, such loss is allowable as a tax deduction, though good accounting may dictate that the loss be charged to surplus or to an appropriate reserve rather than to the expenses and costs for the year, if the inventories concerned have been accumulated over a period of years.

The cumulative feature. One of the most common protective devices for preferred stock is the cumulative feature. This provides that if a company falls behind on its preferred dividends, the unpaid arrears must be made up before any further disbursements may be legally made to the common stock. In theory such provision should stimulate

* Interest was often noncumulative for the first five years, after which it became cumulative.

the management to wipe the back dividends off the slate as soon as possible.

But the cumulative feature has not always worked out so ideally. Let us consider a company with the following balance sheet:

Assets		Liabilities	
Fixed assets (net).....	$1,550,000	Common stock, 15,000 shares, par $100.....	$1,500,000
Current assets........	200,000	Current liabilities.....	100,000
Other assets.........	50,000	Surplus..	200,000

The profit and loss summary shows an average net income of $105,000, or $7 per share. This amounts to about 6.2 percent on the total net worth.*

The company is doing well, but it finds that nonvoting and nonparticipating preferred stock carrying a dividend rate of 4 percent can be sold at about par. If the company could continue earning the same rate on the newly acquired capital as on the old, the earnings on the common stock would be increased without diluting the control by the common stockholders.

So the company decides to issue 5000 shares of 4 percent cumulative nonparticipating nonvoting preferred stock. This is sold to the public at $102. The commissions and expenses of the underwriting and distributing bankers are $2. The proceeds to the company thus become $100 per share. The contract stipulates that if dividends remain unpaid on this preferred stock for eight consecutive quarters, the preferred holders shall have two votes per share. Dividends on the common stock are not to be declared unless the ratio of current assets to current liabilities after the payment is at least 2.5 to one. Neither additional preferred stock nor any prior security is to be issued unless three fourths of the preferred stock assents and unless the preferred dividends, including those on the proposed issue, are covered at least three times by the average net income for the three preceding years.

Of the $500,000 proceeds to the company $400,000 is invested in additional plant and $50,000 in working capital, and $50,000 is used to pay off a troublesome bank loan.

* Net worth is the sum of the par value of the common stock and the surplus or $1,700,000, which divided into $105,000 gives almost 6.2 percent. If preferred stock were outstanding, it would also be included under net worth.

The *pro forma* balance sheet of the corporation now stands as follows:

Plant (net)	$1,950,000	Common stock, 15,000 shares, par $100	$1,500,000
Current assets	250,000	Preferred stock, 4 per-cent, cumulative	500,000
Other assets	50,000	Current liabilities	50,000
		Surplus	200,000

For various reasons this company soon runs into financial difficulties. It continues to pay a dividend or two on its preferred after these adverse circumstances have set in and even distributes a small dividend out of surplus to the common stock. But finally it discontinues dividends, first on the common and later on the preferred. The working capital is seriously impaired. All the assets have shrunk in value to such an extent that the stock is badly watered.

The preferred stock, according to the contract, gets two votes per share to one for the common. Though the preferred holders do not obtain control, they do achieve some unity in their adversity and they exercise much pressure for improvement in the management.

The financial skies finally brighten. The company gradually returns to the black. It even begins to accumulate a few earnings. After several years of improvement, the directors want to resume dividends. Both the preferred and the common stock would like this to be done. But there are obstacles.

Wiping out dividend arrears. The payment of the dividends in arrears—7 years at $4 per year plus the current year or $32 per share—would require $160,000, which in view of the badly depleted position of the working capital is out of the question. But even more immediate than this practical deterrent is the legal rule that no dividends, either on preferred stock or on common, can be paid when capital stock has been impaired. The fact that this company is in a watered condition means that the actual value of the investment—that is, the net fixed assets plus the excess of current assets over current liabilities—is less than the par value of the outstanding stock. In effect, therefore, the capital stock has been diminished or impaired. The company cannot legally pay dividends out of capital stock even if it does have the available liquid assets. If dividends are to be paid, there must first be a surplus.

There are two approaches to this problem. The first is for the company to reinvest the profits year after year until the values are restored. The chief difficulty with this is the fact that the unpaid dividends on preferred stock are building up so rapidly—$20,000 per year—that the total arrearages may keep ahead of the reinvested earnings. The company may be caught in a treadmill.

The second, and in extreme cases the more realistic, approach is to recapitalize or, as it is often more accurately put, to decapitalize —that is, in some way to reduce the number of shares or the par value of the outstanding stock.* The common stockholders would have to bear the brunt of this, but they would probably insist that some sacrifice also be made by the preferred stock. It must be remembered that no dividends can be distributed on the preferred stock until a surplus is available for that purpose. But it must also be emphasized that no dividends can be distributed on the common stock until the preferred arrearages have been settled. So, again, there will probably be a battle.

The solution could take various forms and include many details. A possible arrangement might be as follows:

1. Cancel the preferred dividend arrearages and give the preferred holders common stock at the rate of ⅕ share for each $32 of such back dividends, including those for the current year.
2. Give the preferred holders new preferred stock, share for share, in exchange for the old, the new to have a par of $100 and to bear a 3-percent dividend rate. The understanding is that regular dividends are to begin soon on this new preferred stock.
3. Give these new preferred shares the privilege of conversion into common stock at the rate of 7 shares of common stock for each 10 shares of preferred.
4. Reduce the par value of the common stock to $50 but give the old shareholders the same number of shares as before. This act would permit the transfer of $750,000 to capital surplus. From this would have to be subtracted a figure adequate to give the preferred holders ⅕ of a share of common in exchange for the cancellation of the dividend arrearages. This would be 1000 shares of $100,000 par value. Part or all of the rest of this created capital surplus could be used to cancel out the deficit—that is, to reduce the value of the assets on the books.

* We have already discussed the principles and methods of recapitalization in Chapter 12.

Another basic type of plan which has often been used might contain the following provisions:

1. Give the preferred shareholders a choice of one of these options:

A. Receiving new prior preferred stock, share for share, for the old, perhaps with a little lower dividend rate, but stripped of the dividend arrearages;

B. Retaining their old preferred stock with the arrearages, but such preferred stock now to be junior to that newly issued.

2. Give common stock to those selecting option *A*. in exchange for the cancellation of the arrearage. The amount of such common stock would depend upon the condition of the company, the amount of arrearage, and the bargaining capacity of the committees representing the security holders.

3. Have the mutual understanding that dividends will begin soon on the prior preferred.

4. Reduce the par of the common stock to $50.

Any such plan, whether of the first or second type or of some other nature, generally requires the favorable vote of a legally stipulated majority of both the preferred and the common stock, since the change involves the amendment of the charter and the altering of the rights and privileges of the security holders. In times of stress, however, particularly if the arrearages are great, such approval is generally relatively easy to obtain. This is especially true if the capital had been impaired by adverse business conditions rather than by bad management.

Let us see how the preferred and common stockholders would fare under the first type of adjustment just described. The preferred stockholders would make the following sacrifices: (1) They permit the wiping out of the dividend arrearages; (2) they accept a reduction in the rate of dividend on their new stock.

They make the following gains: (1) They will receive regular dividends immediately; (2) they are to receive common stock in the company in exchange for the dividends in arrears; (3) they will have the opportunity to convert their preferred stock into common stock.

The position of the common stockholders is affected as follows:

1. In the recapitalization plan the par value of their stock is greatly reduced. This reduction involves merely a recognition of the loss already suffered, but it is made specifically in order to give the corporation a capital surplus, by means of which it can wipe out its deficit and thus be in a position soon to resume dividends.

2. The issuance of $\frac{1}{5}$ share of common stock to the holder of each share of preferred stock in exchange for the cancellation of the arrearages, will, provided there are no dissenters among the preferred holders, increase the common shares by 1000, making the total of such shares 16,000. This tends to thin out the equity and the control of the old common stock.

3. The reduction of the dividend rate on the preferred stock decreases the prior dividends that will have to be paid before disbursements can be made to the common stock.

4. The cancellation of the arrearages makes the restoration of common dividends possible in the immediate future.

5. If market conditions become right, the preferred holders may some day exercise the privilege of conversion. This could further thin out the common shares, the exact amount of thinning depending upon the conversion ratio and the book value of the common stock at the time.

To illustrate the effects, let us assume that the corporation earns $100,000 in a year and that all the available income is distributed as dividends. Let us make these calculations for a year before the financial difficulties occurred and then for a year after the adjustments have taken effect. Let us assume, also, in both instances that the market price of the common stock reflects a capitalization of earnings and dividends at 8 percent—that is, the multiplier is 12.5.

The share of each class of stock before the financial difficulties, under the old capital structure.

Preferred stock gets 4 percent, or $20,000.

The balance for the common is $80,000, which, divided among 15,000 shares, gives $5.33 per share.

Market price of common stock is $66.63 per share.

Preferred stock is also probably selling at a fairly high price.

The share of each class of stock after the adjustments have taken effect, under the new capital structure.

Preferred stock gets regular 3 percent, or $15,000.

Earnings available for common stock are $85,000, which, divided among 16,000 shares, give $5.31 per share.

The preferred shareholders now own 1000 shares of common, the dividends on which give $5310 additional to the preferred stock, or $20,310 in all. The market price of the preferred will presumably rise from its low when the arrears were great, but assuming the same money conditions, such price might now be lower than it was during the earlier period of prosperity. It will be remembered that the divi-

dend rate on the preferred is now only 3 percent, compared with the former 4 percent. The ownership of ⅕ share of common for each old share of preferred will add something to the market value of the holdings of the old preferred group.

The old common stockholders formerly received $5.33 per share on 15,000 shares; now they receive $5.31 per share on the same number of shares, or a slight loss. This loss is easily offset by the prior chance to receive dividends created by the wiping out of the arrearages. The question as to whether the conversion privilege is worth anything to the preferred holders depends upon the conversion price and the future relative prices of the preferred and common stock.

Fair-weather nature of cumulative feature. One can conclude from the above discussion that the cumulative feature may have very little value as a protective provision during bad times when it is really needed. Let us refer to conditions during the middle 1930's, following the worst depression in our history. In 1938 about 46 percent of the $3,860,000,000 preferred stock of utility holding companies and subsidiaries registered with the Securities and Exchange Commission and outstanding in the hands of the public was in arrears on dividends. Out of 158 such companies with outstanding preferred stocks of $2,413,000,000 there were 48, with preferred stocks of $1,331,000,000, whose dividends were in arrears to the amount of $337,000,000.* In many of these cases and others, the arrearages were eliminated by some plans such as those above described. Similar conditions prevailed among many industrial preferred stocks.†

Illustrations. The American Hide & Leather Company furnishes an illustration of the most drastic elimination of preferred dividend arrearages. This company was $217.75 per share in arrears by 1935 on its 7-percent cumulative preferred stock. To make up the back dividends on the approximately 94,000 shares would have required a payment of more than $20,000,000. The total assets of the com-

* S.E.C. *Decisions and Reports,* Vol. 4, p. 470, quoting statistics given by Chairman Douglas of the Securities and Exchange Commission in *The Annalist,* June 3, 1938, p. 747. It will be noted that the arrearages were about one fourth of the par value of the stock, or, assuming the average rate as 6 percent, more than four years of dividends.

† The Securities and Exchange Commission in a Report to Congress in May 1938, pointed out that during the period of November 1, 1935, to November 15, 1936, 44 of the corporations filing proxy solicitation literature with the Commission announced plans to eliminate preferred-stock arrearages. The plans also involved in most cases the reduction of the rate of dividend on the new preferred stock or even the elimination of any fixed rate at all. See S.E.C. *Decisions and Reports,* Vol. 4, pp. 499-503.

pany, admitted to be greatly overvalued, were listed as about $14,-000,000.

The only realistic approach to this rather extreme situation was to eliminate the arrearages and to recapitalize. The stockholders approved a plan whereby each $100 par share of 7-percent preferred was to be exchanged for 1 share of new 6-percent $50 par convertible preferred stock, plus 4 shares of new common. In return, all the accrued dividends were to be canceled. The old common stock was to be exchanged for new common stock under terms which would greatly reduce its total value on the books. This recapitalization enabled the company both to eliminate the dividend arrears and to squeeze water out of the stock.

The preferred holders agreed to this plan because they knew that the back dividends could never be paid in full. The common stockholders were willing to accept it because the wiping out of preferred arrearages gave them a little chance in the future to receive dividends. To soothe and tempt the preferred stockholders, the new preferred shares were made convertible. The company's first common stock dividend was paid in 1947.

The procedure in the case of the National Refining Company was somewhat different. This company was only $28 per share in arrears on its preferred dividends. It was currently earning somewhat more than enough to pay the annual preferred dividend, but the net was far short of what was necessary to take care of the back dividends. The company was eager to eliminate the arrearages and to strengthen the position of the surplus, so as to be able to resume dividends on the common stock.

The plan as approved by the two-thirds majority of the shareholders required by the charter gave a choice to the preferred stockholders. They could either surrender their old noncallable 8-percent preferred stock and receive in return for each such share and all the arrearages 1⅓ shares of new callable $6 cumulative no-par prior preferred stock and ¾ of a share of common stock, *or* they could keep their old preferred stock with the accumulated dividends and all other privileges undisturbed, with the condition that such old shares would become junior to the new prior preferred stock. After some complaint by the dissenting minority, who objected to its old preferred stock being placed in an inferior position, this second plan was finally approved by the courts.* The condition of the surplus

* *Johnson* v. *Lamprecht,* 15 N.E. (2d) 127 (1938, Ohio). See also *Illinois Law Review,* Vol. 33, pp. 212-17. The company faced the problem as to what

was improved by reducing the common stock from a par of $25 to a lower stated no-par value.

A secondary purpose of the National Refining plan was the provision of a more flexible capital structure. The new prior preferred was made callable, while the old had been noncallable. The old preferred contract stipulated that the consent of two thirds of the stock was required before bonds or a prior stock could be issued, but the new stock agreement changed this to a simple majority.

There are numerous instances, of course, in which the back dividends have been fully paid. The United States Steel Corporation, for example, fell into arrears on its preferred stock during the years 1933 to 1936, but these were all cleared up by August 1937.

Though the most important factors affecting the quality of a security are the earnings of the company and the condition and trends of business, nevertheless, as a general rule, the investor should select a cumulative issue. After all, the passing of a dividend on a noncumulative stock may mean that that dividend is gone forever, even though the full necessary income was earned during that year. The noncumulative feature may permit or tempt the directors to pass a preferred dividend even if earned and thus, in effect, benefit the common stockholders at the expense of the preferred.* The cumulative feature helps to curb this temptation.

Though, as we have seen, there are weaknesses in the cumulative feature, the proper remedy does not seem to lie in its elimination. It should rather be strengthened by auxiliary measures such as special reserves and sinking funds. The sinking fund, if enforced, helps to thicken the equity behind the preferred stock and, by so doing, increases the ability of the corporation to pay dividends. It has often been very difficult to enforce a sinking-fund provision when it is really needed, as in times of financial stress.†

to do with the dissenters who hung on to their old preferred stock with dividend arrearages still in effect. In such cases, if there are not too many holdouts, the common stockholders may exert pressure to have these arrearages paid in full, since no dividends can be paid on the common until all arrearages have been canceled. The arrearages on the shares continued, however, to accumulate.

* This is what happened to Wabash Railway noncumulative preferred. See discussion of Wabash case in Chapter 5, pp. 72-73.

† *In the Matter of the North American Company et al.* (4 S.E.C. *Decisions and Reports 434*) the Securities and Exchange Commission approved a certain preferred-stock issue of the North American Company, containing various protective provisions including the cumulative feature. Commissioner Jerome Frank wrote a powerful dissenting opinion in which he criticized the usual operation of the cumulative feature. This dissenting opinion (pp. 462-98) is

Ineffectiveness of other protective provisions. Other protective provisions for preferred stock, as well as some of those for unsecured bonds, may also be fair-weather devices.

Consider, for example, the stipulation that no prior or similar securities shall be issued unless certain balance sheet or income statement standards are met or unless a specified proportion of the security holders affected agree to the change. If the company is operating successfully, it can raise additional funds by the sale of common stock or by the reinvestment of part of its earnings. These steps require no approval by the preferred stockholders. Or a flourishing company may raise money by trade credit or a bank loan, which are generally not prohibited by the protective provision. Such loans or trade debts may, however, become a burden even more troublesome than a bond issue.

If the company, on the other hand, has inadequate earnings, or if its assets are badly frozen, it may not be able to finance itself either by the reinvestment of earnings or by the sale of stock. And the banks and the trade creditors are likely to be most uncordial. The only expedients remaining are to issue bonds or more preferred stock. Strong pressure may now be exerted to induce the preferred holders to permit the issue of additional preferred stock or the floating of a bond issue,* even though the financial standards are not met.

Moreover, certain kinds of obligations, such as purchase money mortgages, are exempt from the operation of the customary protective provision. If the asset acquired is not worth its price, or if the purchase was not justified, a purchase-money mortgage can be just as burdensome as any other mortgage, since it also is coupled with a promise of the company to pay.

Some limitations upon the corporation have to do with situations over which the management has full and independent control. Consider the stipulation that no dividends are to be paid on the common

"must" reading for anyone wishing further to study preferred stocks. Commissioner Frank recommends a special capital reserve or surplus as a cushion to protect preferred dividends in case of losses to the company. See also the S.E.C. *Report on the Study and Investigation of the Work Activities, Personnel, and Functions of Protective and Reorganization Committees,* Part VII, pp. 109-33.

* If the protective provision is meant to safeguard the debenture bonds, a similar form of pressure may be used to get these holders to assent to additional debentures or to the placing of a mortgage without giving the debenture bonds the benefit of such lien. Many debenture bond contracts, it will be remembered, provide that if new mortgage bonds are issued, the debenture holders shall ratably share in, or be protected by, such new lien arrangement.

stock unless the total current assets after such distribution shall equal at least 2½ times the current liabilities or unless the net current assets shall amount to at least 5 times the annual preferred dividends, or unless they are at least ½ the outstanding preferred stocks. The purpose of such provisions is, of course, to make sure that the company maintains a sufficiently liquid position to permit it to pay dividends when they are earned.

Ratios such as those just mentioned may be affected in other ways, however, than by the payment of dividends. Let us refer to the following simple balance sheet.

Assets		Liabilities	
Land, buildings, and machinery (net)	$100,000	Common stock, 750 shares, par $100	$75,000
Current assets	75,000	Preferred stock, 6 percent, 500 shares, par $100	50,000
Other assets	25,000	Current liabilities	25,000
		Surplus	50,000

The net current assets ($75,000 − $25,000) are $50,000, or almost 17 times the dividends on the preferred stock. (Net current assets, it will be recalled, are often referred to as net working capital.) They are equal to 100 percent of the preferred stock outstanding. A substantial dividend, say 10 percent, on the common stock would leave the current assets in an amount still well above the requirement that after the distribution, they must exceed 2½ times the current liabilities. Considering the amount of the surplus, one concludes that the company can pay dividends on the common stock. The preferred seems to be adequately protected.

Now assume that the company uses $50,000 of its current assets to buy a building or new machinery, a step which is wholly at the discretion of management. The balance sheet then stands:

Assets		Liabilities	
Land, buildings, and machinery (net)	$150,000	Common stock	$75,000
Current assets	25,000	Preferred stock	50,000
Other assets	25,000	Current liabilities	25,000
		Surplus	50,000

The net current assets are nil, and the company is in bad shape as far as the working capital position is concerned. The protective provisions forbid it to pay dividends on the common stock, but neither can it advantageously pay dividends on its preferred stock. Perhaps it cannot even pay wages or taxes. It was not the payment of dividends, however, but an operating and investment decision on the part of management that put the company into this frozen condition.

Contingent voting rights may come too late. The special voting rights almost universally given to preferred stock when the company fails to pay dividends or defaults on some important obligation range all the way from one vote per share, if the stock normally had no vote, to the sole voting power as a group. Between these two extremes lie numerous gradations depending upon the ingenuity of the management, the demands of the investor, investment practices and fads at the time the stock was issued, and the relative amounts of preferred and common stock outstanding. Under the last-mentioned circumstance, if the number of nonvoting preferred shares is 50,000 and of voting common is 25,000, the giving of one vote per share to the preferred would accomplish the same thing, under the customary method of voting, as granting it the right to elect all the directors. If there are 10,000 nonvoting preferred shares and 200,000 common shares regularly having one vote each, the contingent right to one vote per share would have little significance.

It should be recognized that granting the preferred stock contingent voting rights is not a perfect form of protection. Even if the preferred gets full control of the company and elects its men, the switch in management may have come too late. The lengths of dividend lapse commonly required to give effect to the contingent vote are four, six, or eight quarters. Much damage may have resulted during twelve to twenty-four months. If the lapsing quarters are to be successive, in order to give the vote or control, the company may, of course, prevent the completion of the required period by paying scattered dividends. Furthermore, the company may pay dividends out of past surplus, even if the current earnings are inadequate, and thus postpone putting into effect the eventual contingent voting right. As a result of circumstances such as these, some authorities have suggested that the vesting of contingent voting rights be based on the inability of the corporation to earn some specified annual amount or

rate or on its failure to live up to some specific and definite financial standard.*

The contingent voting control may become an engine of abuse. Professor W. Mackenzie Stevens describes the experience of one company:

> In one case, a company decided to exchange its outstanding preferred stock for bonds in order that certain capital stock taxes and other expenses might be saved. Stockholders were permitted to exchange their preferred stocks for bonds paying the same return, under such conditions that it was anticipated that all preferred stock would be retired. In a short while, all but a few shares were so retired. During a depression that developed later, the corporation's surplus was used up and it incurred a temporary deficit. Consequently dividends could no longer be paid on either the common or the preferred except out of capital, which was illegal. This was the opportunity awaited by the man who had deliberately neglected to convert his preferred stock into bonds. The preferred stock contract provided that the preferred should have control when its dividends were in default and should remain in control until all cumulated dividends were paid. He seized control of the board of directors through his few shares of preferred stock, elected himself and his friends to all the important offices at good salaries, and apparently has settled down to control of the company indefinitely.†

Summary. Preferred stocks and bonds are usually safeguarded by various "protective provisions." Many of these insist upon certain income standards or certain quantitative relationships among various balance-sheet accounts before dividends can be paid on the common stock or before additional equal rating or prior securities may be issued. In so far as the amount of income, or even the nature of the assets, depends upon the will and whim of the management, these safeguarding devices furnish no real protection. Income figures may be manipulated in various ways, though tax regulations and the rules of regulatory agencies, as well as efforts

* On this topic consult W. H. S. Stevens, "Voting Rights of Capital Stock and Shareholders" in *Journal of Business*, Vol. XI (1938), pp. 311-48. Stevens (pp. 345-46) suggests three points in regard to preferred-stock contingency control: (1) The contingency should be designed to secure conservative management—that is, the shift should be made if net earnings or surplus or certain balance-sheet ratios fall below a specified level. (2) The shift in control should become effective immediately after the passing of a dividend. (3) The voting power transfer should be sufficient to permit a change in the management and policies of the corporation. On this subject, see also S.E.C. *Decisions and Reports*, Vol. 4, pp. 494-95.

† *Financial Organization and Administration*, American Book Co., 1934, p. 72.

by private agencies, are tending to decrease the degree to which the amount of income may be arbitrarily affected. The figures most easily adjusted to suit the purposes of the accountant are the amounts of depreciation and maintenance and to some extent the value of inventories.

Certain relations in the balance sheet are easily subject to the will of management. Consider, for instance, a provision that no dividends are to be paid on the common stock unless the total current assets after such distribution shall equal twice the current liabilities. The amount of current assets, however, may be affected by numerous other things besides the payment of dividends: they may be dissipated by investment in fixed assets. The provision that certain voting rights be granted to preferred stock in the event dividends are not paid is often inadequate. The vote may be gotten after the damage has been done.

Even the cumulative feature for preferred stock is often worthless. The arrears may become so large over a period of years that the company is literally unable ever to pay them. Often some plan of recapitalization has been adopted which has forced the preferred stockholders to accept common stock in place of the back dividends. They may even accept a new issue bearing a reduced rate of dividend in exchange for their old preferred stock.

Fundamentally, the value and standing of a preferred stock or a bond depend upon the reasonably expected future earnings of the corporation rather than upon mere protective provisions. This does not mean, however, that safeguarding devices are of no value. It certainly does not mean that safeguarding devices ought to be omitted from preferred stock and bond contracts. The chief problem seems to be how to make these safeguards really effective. It has been suggested that the contingent voting right for ordinarily nonvoting preferred stock should vest not only if dividends are not paid but also if there are certain evidences of lack of conservative management. The special voting right might be given immediately upon the passing of a single dividend and it should be of sufficient strength to permit the preferred holders to bring about a real change in the management and policies of the company.

PROBLEMS

1. *The Survey of Current Business,* October 1947, p. 9, in reporting the profits of corporations for the first half of 1947 states that

the figures "include inventory profits which, in the recent period of rising prices, have been an important factor in the advance of reported profits." The article points out, however, that the extent of such inventory profits was not as great as in 1946.

a. What is an inventory profit?
b. What would be the situation as to such inventory profits if an individual company used the last-in-first-out method?
c. *The Survey* also published figures to show the profits after excluding such inventory profits. How can such adjustment be made?

2. News item in regard to the proposed recapitalization of Virginia Iron, Coal & Coke Company:

Directors have voted to submit to stockholders a proposed recapitalization plan involving exchange of 7 shares of new $25 par 4-percent cumulative convertible preferred stock for each outstanding $100 par 5-percent preferred share and accrued dividends thereon, and exchange of new $10-par common stock for present $100-par common on a share-for-share basis. Each share of new preferred would be callable at $100, and be convertible into 2 shares of new common. In addition, new preferred would have a sinking fund of 20 percent of annual net earnings after depreciation, depletion, taxes, and dividends paid. Sinking fund would be used for retirement of preferred shares.

a. Is this a recapitalization or a "decapitalization"?
b. What will happen to the preferred dividend arrearages according to the plan?
c. What arguments could be advanced to get the consent of the preferred stock? (Note that the dividend arrearages are to be canceled.)
d. What arguments can be advanced to obtain the consent of the common stockholders?
e. What is the probable reason for giving the new preferred stock the conversion feature?

3. Review the reorganization plan of the Philadelphia and Western Railway Company (Chapter 13). How were the arrearages of cumulative preferred dividends disposed of? Did the preferred holders have any legal complaint as to their treatment?

Chapter 21

Protective Provisions in Bond Contracts

BONDHOLDERS, as well as stockholders, in the large corporation are widely scattered and unacquainted with one another. The value of the bonds of a single owner may be very small both in relation to his individual estate and to the total indebtedness of the corporation, and the typical owner does not have the money, time, or skill to protect his small right. It would be possible for the corporation to execute a separate mortgage to each creditor instead of giving a deed of trust to the corporate or indenture trustee, but a corporate mortgage is often the size of a book and hard to understand. The fees for recording such a document would be prohibitive to the small bondholder, and to require the debtor corporation to deal individually with each creditor would be a hardship. It might be harassed by a multiplicity of suits.

Theoretical position of indenture trustee. We have already seen (Chapter 6) that the indenture trustee theoretically steps into the gap between the corporation and the holders of the bonds. He holds the note and, if there is a mortgage, he possesses the defeasible title * to the property which has been conveyed by the corporation as security for the debt. In theory, he protects the bondholders in the event of threatened or actual default of interest, principal, or sinking-fund installment. He comes to their aid if the corporation is negligent or guilty of bad faith in investing the funds received from the sale of the bonds or in carrying out various protective provisions. If anything happens that may prove detrimental to the best interests of the bondholders, the trustee can come immediately to

* As was noted in Chapter 6, some states follow the common-law or title theory in the law of mortgages, while others have adopted the lien theory. Under the title theory the defeasible title passes to the trustee in the case of the corporate mortgage or deed of trust or to the individual creditor in the case of the single individual mortgage. Under the lien theory the title does not pass to the trustee or creditor at all, unless there is a default.

their protection. He commands respect and cannot be given a "run around." He can effectively exert pressure to force the corporation into the straight and narrow path required by the indenture.

Blemishes in the picture. To the bondholder the picture seems beautiful, but we must hasten to state that it is an optical illusion. Things have seldom worked out so ideally. Many cases of inaction and serious breach of faith came to light and jolted public opinion in the late 1920's and early 1930's and brought the indenture trustee under sharp scrutiny.

The most spectacular case was that of Kreuger & Toll Company, a Swedish "organizing, managing, and financing" corporation, dominated by the international promoter, Ivar Kreuger. This company, through two of its subsidiaries, the Swedish Match Company and the International Match Corporation, sought and obtained concessions from various countries to manufacture and sell matches. The subsidiaries advanced funds to these countries, and in return received either government bonds or securities of private banks and railroads frequently guaranteed by the government. Then, in exchange for new funds, they turned these securities over to Kreuger & Toll Company, which, in order to raise more money to carry on further operations, issued its own bonds based on these pledged securities as collateral.

Among these Kreuger & Toll bonds were the secured sinking-fund gold debenture 5s of 1959, issued in 1929.* The total par value of these thirty-year bonds was $50,000,000. The initial or original security was about $60,000,000 par value of foreign "governments," bank-mortgage bonds, and guaranteed railroad stock. Included in the list were about $13,500,000 bonds of the government of France. The indenture drawn up by Kreuger & Toll Company and the investment bankers stipulated that the debtor corporation might substitute certain "eligible" securities for the original collateral, provided the total collateral, including the newly deposited securities, at the time of substitution had a par value equal to at least 120 percent of the outstanding debentures and provided the earnings on the collateral were equal to at least 120 percent of the interest requirements. The substituted securities were to be (1) foreign bonds issued by a jurisdiction having a popula-

* Technically the term "secured debenture" contains inconsistent ideas. A debenture is an unsecured bond or note backed only by the general credit of the company. The designation "collateral trust bonds" might have been more accurate.

tion of at least 300,000, or (2) bonds or notes of mortgage banking institutions, or (3) shares in railroads or other companies on which dividends up to a minimum rate were guaranteed by the respective governments. In the determination of the adequacy of the collateral, no reference was required to the market value. The substituted bonds were not required to meet any quality tests.

Almost all the deposited securities were placed for safekeeping with a depositary in Sweden, and most of the debentures were sold to American investors. The sole judge as to whether the securities met the requirements of the indenture was Kreuger & Toll Company. The trustee was Lee, Higginson Trust Company of Boston, which had interlocking financial and personal interests with the debtor corporation and with the main underwriter, Lee, Higginson & Company. In its application for the listing of these debentures on the New York Stock Exchange, Kreuger & Toll Company agreed to notify the Exchange authorities whenever any substitution of securities was made. This application was signed on behalf of Kreuger & Toll Company by one of its directors, who was also a partner in Lee, Higginson & Company. This director had never attended, and never did attend, a board meeting of Kreuger & Toll Company.

The suicide of Ivar Kreuger in March 1932 led to revelations of manipulation and counterfeiting that rocked the financial world. It was learned that Kreuger had made substitution of securities in the collateral at the average rate of one a month from July 1929, when the debentures were issued, to the time of his death. Though he maintained the required 120 percent par ratio, he had substituted inferior securities. The most tragic substitution was that of low-grade Yugoslavian government bonds and Hungarian land reform mortgage bonds for the high-grade French "governments." If no substitution had been made, the market value of the collateral, which was in excess of $50,000,000 at the time of the issue of the debentures, would have been about $24,500,000 in January 1933, with an annual income of $1,681,500. As it was, the value of the collateral at the beginning of 1933 was only $9,750,000, with an income of $628,350, or considerably less than the $2,379,825 necessary to meet the interest on the outstanding debentures.*

* Some of the secured debentures had been called for the sinking fund. The income from the pledged securities was much less than the 120 percent of the interest requirements of the debentures. The indenture provided, however, that a fall in the income below the required ratio was not to be considered a default.

No notice of any substitution was given to the New York Stock Exchange until after the death of Kreuger. By this time thirty-three substitutions had been made. Though the trustee, Lee, Higginson Trust Company, had full knowledge of the substitutions, it did not take any steps to protect the interests of the bondholders when such measures might have done some good. Lee, Higginson & Company, the underwriter, had the information as to the substitution, but apparently it too did nothing to protect the investors who had bought the bonds indirectly through them. And the substitutions had been going on for more than thirty-two months.

Investigations. Public opinion swung into action. A United States Senate committee investigated the Kreuger and Toll case in January 1933, and came out with a revealing and pungent report.* Later, at the request of Congress, the Securities and Exchange Commission investigated the work, activities, personnel, and functions of protective and reorganization committees. In Part VI of its report (1936), the Commission discussed "Trustees under Indentures."

These investigations, together with various private studies, punctured the self-righteousness of the indenture trustee. They revealed that the typical trustee was generally appointed by the debtor corporation or by the underwriter or by the two jointly. The bondholders naturally had nothing to say in regard to the selection because no one knew at the time of the appointment who the bondholders would be. The trustee, as a rule, had some financial relationship to the debtor, either as fiscal agent or through interlocking stockholdings and directorates. Generally the indenture was written by representatives of the debtor or the trustee or underwriter or by cooperative effort of all of them. The indenture agreement was often drawn up primarily to protect the trustee and the debtor corporation from blame rather than to safeguard the investor from injury. The instrument was sure to contain an "exculpatory clause," which expressly exempted the trustee "from all liability except for gross negligence or willful misconduct."

Sometimes an institution acted as indenture trustee for two or more bond issues of the same corporation even when they had

* The information in regard to the "secured debentures" has been obtained mainly from the *Hearings before a Subcommittee of the Committee on Banking and Currency*, United States Senate, 72nd Congress, 2d session on S. Res. 84 and S. Res. 239, Part 4 on Kreuger and Toll. The data as to the market value and earnings of the pledged securities were given in the testimony of Max Winkler, pp. 1312-15 of this report.

different priorities. That a trustee probably could not fairly represent the interests of both a first-mortgage bondholder and a debenture bondholder in the same corporation was not fully appreciated in the beginning.

The customary indenture contained very few provisions for the protection of the real "beneficiary"—the bondholder. As a matter of fact, the indenture trustee was seen to be no trustee at all. His duties were mainly clerical. If the trustee suspected or learned that something was wrong with the debtor corporation, he had the power to investigate, but he was not required to do so by the typical indenture. The trustee could sit comfortably by, collect his fees, and await a demand for action by the bondholders. Even if the trustee knew there was a default, he could according to law safely assume that there was none until he received notice from the holders of a certain percent (generally 10) of the bonds, who had no routine or effective way of learning that anything was wrong or of obtaining the names of their fellow bondholders similarly wronged. Whatever protection there was in the typical indenture often came when the debtor was bankrupt. By that time the damage had been done.

The following testimony of Mr. L. J. Clark, trust officer of the Pennsylvania Company for Insurance on Lives and Granting Annuities, trustee of the Baldwin Locomotive Works bonds, would be humorous were it not so tragic:

Q.: I call your attention to page 29 of this indenture. Page 29 contains this provision: "Unless and until the Trustee shall have received written notice to the contrary from the holders of not less than twenty-five percent in amount of the notes at the time outstanding, the Trustee may, for all the purposes of this Trust Indenture, assume that the company is not in default under this Trust Indenture and that none of the events hereinbefore denominated defaults have happened."

Was that the provision under which you were acting in ignoring this default?

A.: I would say so.

Q.: Then, the effect of this provision is that even though the trustee knows there has been a default, the trustee can with impunity pretend there was no default unless it receives a demand from twenty-five percent of the note holders?

A.: Yes.

Q.: That is, the trustee knew. . . .

A.: The trustee acted under those conditions.

And in another place:

Q.: Mr. Clark, you have heard the testimony of Mr. Houston. Did you know, after the balance sheets of 1930, 1931, and 1932 were furnished to the Pennsylvania Company, the Trustee, that those balance sheets were not in accordance with the provisions of the trust indenture?
A.: Yes, we must have known it, because we made a request for it in the other form.
Q.: You made a request when?
A.: In 1933.
Q.: When were these notes due?
A.: March 1933.
Q.: When did you make that request?
A.: In June 1933.
Q.: You made your request after the notes were due and after that maturity had not been met?
A.: Yes.

The trustee was not even required under the typical indenture to record the mortgage, though that would seem to be one of his most elementary duties. The trustee was generally not under obligation to see that the funds from the sale of the bonds were used for the purpose announced. The bondholder could not trace these funds, even if he wanted to. The trustee could do this, but he did not have to. The Securities and Exchange Commission pointed out that sometimes bonds were sold to raise funds to erect buildings which never were built. Such a protective provision as the requirement that no additional bonds shall be placed unless certain balance-sheet or earnings ratios are maintained, or the stipulation that no prior bonds shall be sold unless any existing obligations are equally secured with the new issue, were often evaded. The Kreuger and Toll case was but one of many in which the trustee ignored or winked at unjustifiable substitution of collateral.

Most trust indentures provided that the trustee would bring suit upon a request by 25 percent of the bondholders and upon being advanced expense money and guaranteed certain indemnities. Here was one of the most vicious of circles. The trustee probably knew of a lapse by the debtor, but he was not required to tell the bondholders. He generally told the debtor, who, of course, already knew. The bondholders did not know and had no good way of learning, and therefore, they could not make an intelligent query. If some bondholders did learn about difficulties or impending trouble, they could

not easily contact the other bondholders because of lack of time and because the bondholders' lists were in the hands of the debtor and the trustee or fiscal agent, whose interests were often identical. Furthermore, many bonds are coupon bonds, and the owner may not be easily identified or located. If some of the bondholders did form a protective committee and attempt to protest, they were frequently shunted back and forth among the debtor, the fiscal agent, and the trustee. The bondholder was often a man without a friend.*

Trust Indenture Act of 1939. Congress in 1939 enacted the Trust Indenture Act, which is really an addition to the Securities Act of 1933 as amended (to be discussed in the next chapter), and is administered in practically the same way. Specifically, the Trust Indenture Act provides that, with certain exceptions, no bond or note issue exceeding $1,000,000 in principal amount shall be publicly offered for sale or sold through the mails or in interstate commerce unless it is issued under an indenture which meets the requirements of the law and has been duly qualified with the Securities and Exchange Commission.

To qualify under the law, an indenture must, among other things, (1) provide for periodic reports by the debtor and the trustee with reference to the compliance by the debtor with the conditions of the bond contract; (2) set forth the characteristics upon which the eligibility and qualifications of the trustee are based. To be qualified, a trustee must meet many requirements. The trustee must have a capital and surplus of at least $150,000, so as to assure adequate resources to bring an effective suit, if necessary, against the debtor. In general, the trustee must not be closely related to the debtor or to the underwriter by stock ownership, nor may the debtor or underwriter or trustee be controlled by the same interests. Subject to certain exceptions, the existence of common officers or directors among these organizations will disqualify a trustee. An institution may not act as both underwriter and trustee for the same issue. As a general rule, a trustee may not serve as trustee for two or more security issues of the same

* Most of the statements in the text as to the actual position of the trustee are based upon data and testimony found in "Trustees under Indentures," Part VI, of *Report on the Work, Activities, Personnel, and Functions of Protective and Reorganization Committees,* Securities and Exchange Commission, 1936. The Commission analyzed more than 400 trust indentures, most of them made after 1920. It also examined some 600 trust indentures which had been filed with it under the Securities Act of 1933. These later trust indentures continued to show serious deficiencies.

corporation unless there is clearly no conflict between these issues.

The debtor corporation and the trustee must make the lists of bondholders available to any group of three or more applying individuals who have held bonds for at least six months; or, if such applicants pay the necessary expenses, the corporation and trustee must mail to all the bondholders any material which they may wish to receive. If the trustee is genuinely dubious about the propriety of the statements in such material, it may refer the question as to whether such literature should be mailed to the Securities and Exchange Commission for decision.

In case of default in principal, interest, or sinking-fund installment by the corporation, the trustee must notify the bondholders. If the default violates some other provision, the trustee, acting in good faith, may decide to withhold the information in the interest of the security holders. In the exercise of his powers and rights under the indenture, the trustee must use the same degree of care and skill as a prudent man would use under similar circumstances in conducting his own personal affairs.

Primarily the Trust Indenture Act is intended to make sure that the bondholders will have the services of an effective and independent trustee who will serve their best interests. The Act is based on the belief that the bondholders are the persons to enforce the indenture. The basic intent of the Act is to set up machinery to permit the bondholders to get together for their own protection. The chief functions of the Commission are to see that this machinery is kept properly functioning and to make sure that the indenture comes up to the prescribed standards and that the trustee is duly qualified and able to carry out his agreement.

The Act makes no attempt to interfere with the "business provisions" of the indenture, such as the size and make-up of the sinking fund, the contractual nature of the collateral, the maturity date, the rate of interest, or the "wisdom" of the issue. The theory is that under a system of free enterprise such business details are best arranged by the contracting parties.

A digression: one type of security? The suggestion has sometimes been made that corporations discontinue the raising of capital by preferred stock and bonds, whether mortgage or nonmortgage, and confine their security issues to ordinary stock. Certain special forms of issues such as certificates based upon the lease or sale of equipment could also be relied upon by railroad and public utility com-

panies. But the chief or even the only form of security would be common stock.

This rather unorthodox plan would have several points of advantage.

1. *It would mean a simple and understandable capital structure.* Many of our railroad companies have issued ten to fifteen, and more, different kinds of stocks and bonds.* Complex capital structures are common among public utilities and sometimes even in the industrial field. The prospective investor is forced to appraise not only the condition of the industry and of the company but also the relative position of each class of bond or stock. These are difficult tasks in view of the confusing and conflicting descriptive terminology so frequently used. Under the one-security plan, investors would have more opportunity to know exactly what they are purchasing, and corporate managements would not have to resort to hairsplitting phraseology when they wish to raise additional funds.

2. *The innovation would involve a general acceptance of the fact that the value of a security comes fundamentally from the success and credit of the issuing corporation.* Earnings and valuable assets, not words and special privileges, form the basis of security evaluation. Verbiage often melts away during adversity. It is true that a bond represents a prior claim, while a stock has a mere residual interest. A mortgage bond gives, as it were, a first-class passage, a debenture a second-class passage, and preferred stock a third-class passage. These distinctions are of no avail, however, if the corporate steamer sinks. A corporation cannot exist part prosperous and part defunct. One security issue of a corporation cannot be sound while the others are unsound. The corporate parts are members of the whole.

3. *Under the all-stock system, corporations would have more freedom and flexibility in their actions.* A corporation facing high interest charges, it is alleged, cannot feel free to take chances on making adjustments, such as price reductions, in order to maintain its rate of production or to meet competition. Such corporation may be unable readily to trim its sails to the varying phases of the business cycle. Interest charges are often stern taskmasters.

* There were 72 different classes of securities involved in the Missouri Pacific reorganization. See E. Merrick Dodd, "The Modern Corporation, Private Property, and Recent Federal Legislation," *Harvard Law Review*, vol. 54 (1941), pp. 917-48, at 940.

4. ***The one-security system would make it easier to compare various corporations as to their operating efficiency.*** Let us use condensed statements for two companies. Company *A* and Company *B* present the following capital structures, exclusive of surplus:

COMPANY *A*

Common stock, 1000 shares, par $100....	$100,000
Bonds, 5 percent.	100,000
Total capitalization	$200,000

COMPANY *B*

Common stock, 2000 shares, par $100. ..	$200,000
Bonds...	......
Total capitalization	$200,000

The earnings records of the two companies are as follows:

COMPANY *A*

	1935	1936	1937	1938
Total net earnings before interest and dividends	$10,000	$20,000	$5,000	$3,000
Interest paid.	5,000	5,000	5,000	5,000
Available for stock. ..	5,000	15,000		*Deficit*
Earnings per share (1,000 shares).	5	15		*Deficit*

COMPANY *B*

	1935	1936	1937	1938
Total net earnings before interest and dividends..........	$15,000.00	$24,000	$6,000	$2,000
Interest paid............. ..	0.00	0	0	0
Available for stock...... .	15,000.00	24,000	6,000	2,000
Earnings per share (2,000 shares)..................	7.50	12	3	1

The earnings per share for Company *A* range all the way from $15.00 to a deficit, while for *B* they are proportional to the net income. The fact that *A* engages in trading on the equity, while *B* does not, makes a comparison of the earnings per share of the two companies as well as their stock prices, useless as an indicator of their operating success. *A* seems to be in very bad shape in year 1938 while *B* appears to be somewhat better off. In reality, however, Company *A* in that year is earning at the rate of 1.5 percent of its total capitalization, compared with 1 percent for *B*.

5. *If there were no prior securities outstanding, stocks would in general tend to be less speculative.* The market price of stock is affected both by the total present and anticipated income of the company and by the earnings and dividends per share. As we have already seen, the earnings per share of common stock of a corporation trading on the equity vary more widely than those of a corporation not engaging in that practice. In the illustration just given the stock of *A* is likely to be considered more speculative than that of *B*. The differences in the capital-raising policies of the two corporations tend to obscure and even to distort the financial results.

Strong arguments may be raised, however, against this plan. It would prevent a corporation from distinguishing among the purposes for which it is raising money. For instance, fixed assets are generally acquired by money furnished by stockholders and bondholders. Current assets may also be obtained by the sale of bonds, but they should generally be acquired through the sale of stock or by the reinvestment of earnings or by short-term credits. If intangibles or good will are to be listed on the books, they should be covered only by surplus, or certainly by no security higher than common stock. Any equipment purchased (or leased with the intention to purchase) by a railroad company should logically be financed through the sale of equipment certificates.

Critics also point out that an investor may not be willing to place his money in a corporation unless he is given special privileges and priorities, such as a mortgage. Moreover, investors often want securities bearing a fixed rate of dividend or interest. They may refuse to buy common stock because the return is too speculative and uncertain. From the point of view of the corporation it may be argued that interest charges provide a powerful motivation to management. The officers must be active and alert in order to "keep ahead of the sheriff." Such stimulus may not be present

if common stock is the only security outstanding. The common-stock company is too likely to lean back and rest upon its laurels.

These arguments have varying degrees of validity. The proposal would not necessarily preclude a corporation from raising funds by such special devices as the equipment-trust obligation. As to the point that the plan would prevent the restriction in the use of funds according to the type of security issued to raise them, it may be argued that in a strong going concern it is really not necessary to make any broad distinction as to the sources of the funds. A weak company, on the other hand, may be forced to disregard the source of the funds or may use them for purposes not intended or planned.

To the contention that investors may not want common stock because it is too speculative, a possible answer is that the very issue of prior-claim securities tends to add to the uncertainties of common stock. If there were no such prior claims, the earnings on the common stock would fluctuate with the net income of the corporation. Investors in the bonds of a sound corporation might be willing to buy common stock in that company if the leverage influence of prior securities were eliminated.

The demand for securities carrying a fixed rate of return can be met by common stock as well as by bonds. If a company with a positive but widely fluctuating income has only common stock outstanding, it will probably be able to pay a more steady rate on this stock than if there were a wide variety of stocks and bonds. The stock of such a one-security company might be sold on as good terms to the discriminating investor as a bond with numerous fancy protective provisions. If it is necessary to give special privileges to a security in order to sell it, such security should probably not be issued at all.

The argument that the compulsion of the interest payment is a stimulus to management seems on the surface to have a high degree of validity. Pressures of a burdensome debt may, however, make the officials reckless, rather than careful, in their policies. The payment of interest, moreover, is a function of finance, not operation. The operating officials should keep their eyes on the efficiency of the technical set-up rather than upon the status of the securities as an investment. A corporation may be efficient in an operating sense, but the presence of a top-heavy capital structure with consequent high fixed charges may make it appear inefficient. The argument that a corporation without bonds outstanding is more

independent in its policy and price actions seems to rest upon the assumption that a company will, for instance, lower its price if it is able to do so. It has not been proved that companies with only common stock have more sensitive prices than have corporations with bonds included in their capital structure.

The widespread development of the corporation, as we shall discuss in greater detail in Chapter 27, has changed the basic processes of investment. The stockholder is the holder of an equity security, but he frequently considers himself a creditor. According to the law the bondholder is a creditor but he may also consider himself an owner. Neither bondholder nor stockholder is technically an investor. The corporation really does the investing, and, in deciding whether to put the money into fixed assets or current assets or to use it for paying current debts, it gives little attention to the type of security issued to raise such funds. If the corporation, as the final placer of the funds, does not clearly differentiate among the sources, should the suppliers of such funds attempt to make such distinction?

A prior claim may be either unnecessary or ineffective. If the company is prosperous, the extra security is not needed. If the company is failing, the value of even the mortgaged property may have dwindled away. Inefficiency, negligence, government moratoria, changing economic conditions, revolutionary inventions, the mere passage of time—these and numerous other forces may render a mortgage of dubious value. The bondholder frequently holds a right which in good times is not needed but which in adversity has no value.

But even worse! The holders of the bonds backed by a mortgage may not be able to exercise their right even if the secured property has some value. The debtor corporation may occupy a strategic position in our economic and social life, and the courts may not permit the bondholders to take the property. The bondholder may find himself involved in a reorganization which may still further peel away his bundle of rights. He may even find himself a stockholder in the company! Even if he could take the property, he might be at a loss to know what to do with it. The holder of a note secured by a mortgage on an ordinary farm or a dwelling house could take the farm or home and perhaps use it to advantage. But the typical bondholder who knows nothing about railroading would hardly know what to do if he suddenly became the owner of a branch line.

Bonds and stock basically only a claim on earnings. Economists have long realized, and courts are beginning to follow along in this view, that in the final analysis both stocks and bonds represent merely a right to participate in any future earnings of the corporation.* In the large corporation the distinction that stocks have a share in the selection of the board of directors and that bonds have no such share has become of only academic significance. It is doubtful if the typical stockholder in the larger corporation shows any more active interest in its management than does the bondholder —until things go wrong! And by that time the real difference has largely disappeared. Both the bondholder and the stockholder are essentially merely furnishers of capital.

Summary of federal legislation. The investor in securities has often been the victim of misrepresentation, manipulation, and negligence. Government has found it necessary to come to his rescue and protection. The most important legislation in his behalf has come from the federal government. The main federal statutes in the order of their enactment are: Securities Act of 1933, Securities Exchange Act of 1934, Public Utility Holding Company Act of 1935, Chandler Bankruptcy Act of 1938 (with special reference to Chapter X), Trust Indenture Act of 1939, Investment Company Act of 1940, and Investment Advisers Act of 1940.

In Chapter 13 we referred to Chapter X of the Bankruptcy Act and in this Chapter to the Trust Indenture Act. We shall later discuss the Investment Company Act in Chapter 26 and the Public Utility Holding Company Act in Chapter 29. In the next chapter we shall consider in detail the background and provisions of the Securities Act of 1933 as amended in 1934. Following that we shall also analyze the Securities Exchange Act of 1934.†

* A significant observation is found in a dictum (p. 114) by Judge J. Foster Symes of the federal district court of Colorado in *In re Denver and Rio Grande Western Railroad* (1940), 38 F. Supp. 106: "There is much justification, therefore, for the observation by writers on the subject that a fixed interest bond is not really a binding promise to pay the principal and interest of the bond, but contains an implied option in favor of the railroad borrower to pay the bondholder with a junior bond and some stock in place of cash perhaps in a reorganized company. So that a railroad bond, therefore, becomes merely a claim to a portion of the income and corpus of the property that takes precedence over the claim of other creditors."

† The student who wishes a brief but illuminating treatment of these acts is referred to Willard E. Atkins, George W. Edwards, and Harold G. Moulton, *The Regulation of the Security Markets,* The Brookings Institution, 1946. Earlier concise discussions are Emmanuel Stein, *Government and the Investor,* Farrar & Rinehart, 1941; and Homer Cherrington, *The Investor and the Secu-*

Summary. The bondholders of a corporation are widely scattered and unacquainted with one another. The nature of the indenture contract is generally such that each holder could not by himself possibly follow out his individual rights. The indenture trustee theoretically steps into the gap between the corporation and the holders of the bonds. If there is a mortgage, he becomes a sort of beneficial mortgagee. He is supposed to see that the provisions of the bond indenture and any safeguarding devices therein are carefully heeded.

The backwash from the stock market and financial crashes of the late 1920's and the early 1930's brought to light inadequacies of the typical trust indenture and the weaknesses in the position of the indenture trustee. The Kreuger scandal showed, for instance, how the trustee could turn his back on all sorts of defaults and manipulations by the debtor corporation. It also showed that the trustee was often derelict in his duty if he and the underwriters and the debtor corporation were mutually interested financially. Again, the trust indenture itself was deficient in various ways.

Ensuing investigations by Congress and studies made by the Securities and Exchange Commission resulted in the passage of the Federal Trust Indenture Act of 1939. This Act forbids the sale of debt securities through the mails or interstate commerce unless the securities are issued under a trust indenture which conforms to statutory standards. The indenture trustee must meet certain financial requirements. He must also be effective and independent. An institution cannot serve both as underwriter and as indenture trustee for the same issue. In general, the Act prohibits a trustee from serving in that capacity for two or more issues of the same corporation. Upon request of any group of three or more bondholders, the trustee must make the complete list of bondholders available, and, upon reimbursement for the expenses, he must mail to all bondholders any material this group may wish sent. In case of default by the debtor in certain terms of the contract the indenture trustee must take certain steps in protecting the interests of the bondholders under the trust indenture. The Act does not require the Securities and Exchange Commission to enforce the terms of

rities Act, American Council on Public Affairs, 1942. The Securities and Exchange Commission in each annual report summarizes the Acts, but the *Tenth Annual Report* for the fiscal year ended June 30, 1944, is especially valuable for reference here because it gives a ten-year survey, 1934-44, of the work of the Commission in connection with each of the laws.

the indenture; such enforcement is left up to the bondholders themselves, through the proper legal channels.

In this chapter an analysis was also made of the proposal that corporations should have outstanding only one kind of security. Such plan would make for ease of understanding a corporation's financial position; it would focus attention on the earnings of the issuer rather than upon phrases and terminology; it would provide greater flexibility of action, since companies would not be harassed by interest charges; it would facilitate the comparison of the operating results of corporations; and, by eliminating leverage, it would make the typical common stock less speculative in that there would be no varying amounts of interest charges to cause fluctuation of the earnings per share. There are also strong arguments against this proposal.

Though this plan seems revolutionary, it is increasingly being recognized that there is little difference between the furnishers of creditors' funds and the furnishers of owners' funds. There is very little difference as to the degree of their participation in the management. A prior claim is often either unnecessary or ineffective. If the company is prosperous the extra security is not needed; if the company is failing, the additional protection may be unavailable and therefore worthless. Both a stock and a bond are fundamentally merely rights to participate in any future earnings of the issuing corporation.

[Problems will be found at the end of Chapter 22.]

Chapter 22

The Protection of the Securities Investor—The Federal Securities Act

The shift in investment emphasis. A century ago the average person, regardless of the course of business, generally placed his savings in land and tangible commodities. If he did lend the money, the transaction took the form of a deposit in a nearby bank or a loan on a mortgage to a neighbor or relative. He had, or thought he had, adequate opportunity to appraise the land and commodities. He felt reasonably well acquainted with the bank and with the borrower's financial prospects. The buying of stocks and bonds was left to the upper classes and to the financial speculators. This stage in our development has appropriately been called "commodities capitalism."

After the turn of the century the situation was radically changed. People became securities-conscious. Though owners of savings continued to place many of their funds in land and tangibles, the average investor might well acquire some kind of security or "liquid claim," such as insurance policies, stocks and bonds, and bank deposits. By the 1920's purchase of these claims had become "the thing to do" for the middle-income group, even for some in the lower group. Adolf Berle and Victoria Pederson * have estimated that, whereas in 1880 liquid claims equaled about 16 percent of our national wealth, by 1930 the proportion had risen to 40 percent. Such condition has been called "securities capitalism."

This change in investment emphasis had tremendous influence upon our social attitude. The direct ownership of land and tangible

* "Liquid Claims and National Wealth," Macmillan Co., 1934, p. 72. These liquid claims include bank deposits, cash, the surrender value of life insurance policies, and domestic stocks and bonds. These totaled $7,000,000,000 in 1880 and $131,000,000,000 in 1930. The value of the stocks and bonds during these fifty years multiplied ten times.

articles had meant closeness to the soil, direct responsibility for the management of one's own commitment, pride of ownership. The purchaser had opportunity to analyze before he bought. He knew, or hoped he knew, what to look for at the time of the transaction, and, as is customary in a frontier economy, he had little use or respect for "expert knowledge." Securities capitalism, on the other hand, meant remoteness from the soil, lack of direct responsibility for the management of one's investment, and the absence of an *esprit de corps,* to say nothing about acquaintance, among the owners of securities even in the same large company.*

Under securities capitalism the investor often found himself possessing inadequate information on which to base his decision. The purchaser of a security had before him an engraved piece of paper and financial statements containing only a small part of the information which he ought to have in order to make an intelligent commitment. The actual operating properties were often so far away and so widely scattered that it was impossible to inspect them. And even if the investor could inspect, he probably did not understand the complexities of the plant. The pyramiding of companies created a tenuous chain between the provider of the funds and the base of operations. The purchaser of a security, moreover, often played a hunch and was easily led astray.

Position of the defrauded purchaser. In a commercial exchange there has always been a possibility of fraud. Under the common law a seller may be held liable for fraud if, knowing it to be false, he makes a misrepresentation of a material fact, either by word or by active conduct. A deliberate physical concealment of essential facts may also constitute such misrepresentation. To be guilty of fraud, a person must have intended to induce the purchaser into making a decision to his injury. Moreover, the false statement or active concealment must have been substantially successful in accomplishing this purpose.†

* "There is no escape from the fact," say A. A. Berle and Victoria Pederson, *op. cit.,* pp. 201, 203, "that the truly liquid asset is a dead asset; as it enters into production it becomes less liquid; what has happened has been the splitting of the atom of property so that he [the holder] has the dead part, and someone else the living."

† Fraud may be perpetrated by the buyer as well as by the seller. For example, a purchaser of goods may deliberately misstate his financial position when applying for credit. But, if the parties deal at arm's length—that is, if the relationship of the parties is not one where a special duty is owed, as between trustee and beneficiary or between partners—the buyer need not divulge any special knowledge he may have which would enhance the value of the

It has always been extremely difficult for a defrauded purchaser of a tangible article to recover damages or even merely to rescind the agreement. The burden of proving fraud under the common law rests completely on the buyer. He must prove that the misstatement or concealment was really one of a material existing fact, not merely the seller's opinion as to future possibility. He must prove that the seller intended to defraud him and that the deceit actually was effective. These are difficult tasks. Moreover, by the time the fraud is discovered, the seller may have skipped the country or he may be without financial resources from which to make adequate restitution.

The victim of a fraudulent security transaction is even more helpless than the defrauded purchaser of a tangible commodity. Usually both the issuer and seller of a bad stock or bond have been careful to give material and statistical facts in regard to other companies and other fields rather than their own. The "facts" given about the company whose security is being sold have frequently been mere "puff" or slippery words and "plausible irrelevancies," such as "It is the best in the state"; "We are letting you, as a leading citizen, into something really good"; "Don't fail your children or your children's children"; or mere prophecy, such as "This company will earn $100 per share"; "The stock should be worth $3000 by next fall."

Even where the prospectus or description of the security contained statements as to assets, liabilities, and operating results, the seller was often careful to include in it a provision that the facts were collected from sources which "We believe to be reliable, but we do not guarantee their accuracy." Moreover, by the time the fraud was discovered, any legal right or recourse available to the purchaser probably had evaporated or, in most instances, was of little value. The damage had been done. Since "of all the hard things to bear and grin, the hardest is being taken in," the victim of a securities swindle usually kept very quiet and did not report or press his case. General knowledge of his having been defrauded might hurt his standing in the community. He consoled himself by the determination that he would make an extra killing the next time. This attitude, of course, played into the hands of the swindler.

purchase. Should he know of the existence of oil on land he wishes to purchase, he need not reveal this knowledge to the seller. However, he must not actively conceal the fact so as to make it physically improbable for the owner to discover its existence.

If the buyer of land or of a cow has been defrauded, he can give himself some comfort at least by using the land as "standing room" or by selling the "high-class cow" as beef or for the hide. But the investor cannot raise potatoes on a worthless stock certificate.

Even the respectable underwriter and the seller of legitimate securities was able to take advantage of this peculiar situation. He could pump up the earnings by using statements showing inadequate depreciation and obsolescence allowances or insufficient expenditures for maintenance. He could obscure unfavorable income for some specific year by the use of the term "average earnings," by which he could gloss over the fact that the trend has been downward. The seller often made known through his advertising and prospectus—not guaranteed to be accurate—only that information—probably true—which would give a favorable impression. The prospective purchaser could, of course, fill in the gaps by asking questions, but chances were he did not know what questions to ask.

The capital structures and corporate interrelationships in many of our business organizations became so involved that the average individual was unable to understand the figures when they were correct. Even bankers and financiers had difficulties at times in wading through the passages and byways of corporate labyrinths. Owen D. Young, lawyer, financier, and then board chairman of General Electric Company, is reported as saying of the Insull system: "I think it is impossible for anyone to get an accurate picture of the Insull set-up, and I remember the feeling of helplessness when I began in February, 1931, to examine the structure." Samuel Insull himself was unable during his court trial quickly to name certain companies in his gilded kingdom.

Special protection to investor. Soon it was recognized that the protection of the securities investor required stronger and more direct implementation than the common-law rule of fraud. Private efforts, such as the activities of the Better Business bureaus, of newspaper and magazine advertising departments, and of the Investment Bankers Association, and the listing regulations of the organized stock exchanges, were valuable as far as they went, but their scope was limited.

A federal criminal statute forbids the use of the mails to defraud. But this law generally punishes after the offense has been committed. The law also provides that the Attorney General of the United States may issue stop orders whenever he finds anyone selling fraudulent securities through the mails. Although this statute has had a distinct

deterring influence, its effects are not far reaching. It does not attack the root of the evil—the issuance of fraudulent securities.

State blue-sky laws. In an attempt to stop the sale within their jurisdiction of securities which "have no more basis than so many feet of blue sky," various states have enacted special regulatory legislation. Rhode Island, in 1910, passed the first "blue-sky law," followed by Kansas in 1911.* By 1920 three quarters of the states had followed suit. The close of World War I gave an additional impetus to this form of legislation. It was anticipated that the government would call many of the Liberty and Victory bonds, that a large number of people would also voluntarily dispose of many of them on the market, and that recipients of these funds would be tempted to purchase inferior securities and might fall an easy victim to swindlers. By 1923 a total of forty-six states had passed blue-sky laws, and in 1931 Delaware joined the movement, leaving Nevada as the only state without some form of regulation of security sales. Many of these laws have been amended from time to time, and the blue-sky law now in effect in a state may have little similarity to the one it first enacted.

Though there are numerous variations in detail, blue-sky laws fall into two general classes: (1) those providing for some kind of licensing or registration; (2) those applying a special broader concept of the law of fraud.

1. *Licensing laws.* This group of laws contains two distinct forms of licensing provision. The more common form—registration by qualification—provides for the licensing of the company issuing the securities before they can be sold within the state. It requires the issuing corporation to file certain detailed information with the appropriate state commissioner, who is to permit the sale only if he finds that the corporation is solvent and possesses a reasonable chance of succeeding in its business with the probability of a reasonable return on the investment. The commissioner must refuse permission if the sale will work a fraud upon the purchaser. It must be emphasized that the commissioner does not recommend or "approve" the security.

* Since the Rhode Island statute of 1910 insisted merely on "registration by notification" and contained few positive requirements, it is generally not given credit as being the first securities law. Instead this honor is accorded the more drastic Kansas law of 1911, which required an issuer of securities to file a detailed statement of specified facts. See Jacob M. Edelman, *Securities Regulation in the Forty-eight States,* The Council of State Governments (1313 East 60th Street, Chicago), 1942, pp. 1-2.

The other common form of law provides for "registration by notification." This differs from the "registration by qualification" law mainly in that the information required is not so detailed and the applicant may proceed to sell the securities without prior "approval" by the commissioner. A few of our states accept the fact that a security has been registered with the Securities and Exchange Commission as sufficient fulfillment of the requirement of notification.

Another form of licensing calls for dealer registration. Any dealer wishing to dispose of securities within the state must register with the commissioner. The issuer of the security does not have to be licensed, but the dealer may be called upon to furnish certain information in regard to the security he intends to sell. Most of the state laws call for some combination of dealer registration and security qualification or registration.

2. *Fraud laws.* This group of laws contains those statutes based on the Martin Act of New York state. The Martin Act, which also added a dealer-licensing provision, was passed in 1921 but has been amended many times. It not only authorized the Attorney General to bring criminal prosecution, but also permitted him to bring suit to enjoin any person or corporation from engaging in fraudulent practices in the sale of securities. The New York law broadened the general concept of fraud to include all statements the tendency of which is to deceive or mislead the purchasing public, even though such "utterances" do not arise from any evil design to work injury on others. Thus, fraud may be present without the seller actually knowing of the falsity. This is a sort of "equitable fraud," or fraud without *scienter,* as legal writers put it.

Under such law promoters and dealers must make a reasonable investigation before issuing a prospectus. If a promoter announces the price of stock as, say, $21 when a reasonable investigation before issuing the prospectus should have shown that the stock was clearly not worth that amount, the promoter may be enjoined from selling the securities. This is true even if he also announces at the time that the stock is a speculation and that the information has been obtained from sources believed reliable, but which are not guaranteed.*

* The main characteristics of state blue-sky laws as they stood in 1942 were summarized by Jacob M. Edelman, *op. cit.,* p. 29, as follows: "[Our tables show] that forty-four states license or register securities dealers and brokers; that forty-three states qualify securities for sale only after pertinent data bearing on their soundness has been disclosed; and that thirty-two states expressly

Weaknesses of blue-sky legislation. The state "blue-sky" laws have not been highly successful.* They are generally recognized as being weak in several respects. The most important defects may be mentioned:

1. *Most of the laws permit too many exemptions.* Common exemptions in the past have been: securities listed on recognized stock exchanges; securities issued by public utilities, banks, and insurance companies which are scrutinized by the respective government agency; real estate mortgage bonds or notes; securities of a foreign government with which the United States is on friendly terms; and bonds issued by the federal government or by one of its agencies or by a state or local government. Many securities listed on recognized exchanges, however, have become worthless. Utility stocks and bonds have been highly watered. Real estate mortgage bonds often went through reorganization. Some of the worst debacles during the decade of the late 1920's and early 1930's came through bonds issued by Latin American countries with which we were on friendly terms. There has been some tendency to limit the list of excepted securities.

2. *State laws apply only to intrastate transactions.* The laws do not cover sales made to people within the state by solicitation from individuals in other states. A promoter in New York sends sales literature to a prospect in Indiana. Let us say the prospectus is on a stock which cannot be sold in Indiana without proper registration. The Hoosier prospect replies by letter that he will buy a certain

authorize an administrative officer to obtain court injunctions to stop or prevent fraudulent issues and sales. Twenty-eight states embody all three of these preventive or punitive measures in their laws. Only Nevada has none of them."

The author goes on to add in a footnote that the Attorney General of Delaware considers the law of that state a dead letter. In Chapter IV Mr. Edelman gives numerous tables comparing the laws of the various states.

* The effectiveness of any regulatory or criminal statute is difficult to measure. How, for instance, can one ascertain the effectiveness of a law against burglary? Undoubtedly many security swindling projects never materialized because of the requirements and penalties of the laws. Reports of many states indicate that the blue-sky law has been fairly effective. The Wisconsin enforcement authority reported that seven years after the enactment of its blue-sky law the "total number of dealers in low-grade securities was only 50 percent of the number operating in 1919, when the law became effective, and that the amount of money invested in their wares had decreased 75 percent, although the number of dealers in high-grade securities had increased." Similar reports come from several other states. "Hearings before Committee on Banking and Currency." United States Senate, 73d Congress, 1st session, on S 875, 1933, p. 323. It is recognized, of course, that issuers of dishonest securities were frequently driven from the states whose laws were strict and well enforced to those that had more lax statutes or less effective enforcement.

number of shares of stock. This is an offer. The New York promoter then accepts this offer by letter. The sale is thus consummated at the time and place of the mailing of the second letter, which is New York. The Indiana law does not apply to this transaction. Even if the original solicitation is of such a nature that the courts would consider it an offer and the communication of the answer by the same medium by the Indiana resident as the acceptance, thus causing the contract to be made in Indiana, the New York security seller probably could not be extradited to Indiana. He is not strictly a fugitive from justice. In fact he has not fled from anywhere.*

Another way of evading state laws has been to dissolve a corporation and to reincorporate it in another state. A corporation organized in Minnesota applied to the securities commission of that state to sell its securities in Minnesota. The permission was denied. The promoters then dissolved the corporation, formed a new company of the same name in Arizona, transferred the assets to the new company and proceeded to sell the securities of the new Arizona corporation by mail in Minnesota.†

3. *Many dealers distort the meaning of "licensed."* Frequently, contrary to the law, dealers disposing of "licensed" securities distort the "licensed" in their sales promotion and give the impression that the state authorities have approved the security. Many investors are thus thrown off their guard. The nature of this offense is so intangible and subtle, however, that it is extremely difficult to prove a violation of this section of the law.

4. *The typical state blue-sky law approaches the problem from the wrong end.* Instead of attempting to prevent the organization of

* "Hearings before Committee on Banking and Currency," United States Senate on S 875, *op. cit.*, p. 325. Article IV, section 2, paragraph 2, of the United States Constitution specifies that "A Person charged in any State with Treason, Felony, or other Crime, who shall flee from Justice, and be found in another State, shall on demand of the executive Authority of the State from which he fled, be delivered up to be removed to the State having Jurisdiction of the Crime." The New York promoter in our illustration committed the breach of the Indiana law, if it was a breach, while in New York. Many state officials consider the announcement of a security appearing in a magazine within a state as an offer and, therefore, subject to regulation under the blue-sky laws of that state. This would seem, however, to constitute a rather farfetched extension of the concept of "offer."

† *Ibid,* p. 215. This is from the testimony of Robert E. Healy, at the time chief counsel of the Federal Trade Commission and later a member of the Securities and Exchange Commission. The reader will also find in this testimony by Mr. Healy (pp. 211-26) an illuminating account of the methods by which public utility companies watered their stock.

fly-by-night corporations and the issuance of fraudulent securities, blue-sky laws attempt to regulate the sale of such securities after they have been issued. Critics have pointed out that such legislation may be compared to the providing of mosquito netting of varying meshes for each of the many connected rooms or states in a community-occupied house, with no accompanying effort to prevent the mosquitoes from breeding. State blue-sky laws do not go to the fundamentals of the problem.

During the period from 1920 to 1933 about $50,000,000,000 of new securities were sold to investors in this country. By 1933 about one half of these had become worthless.* We were eager to purchase securities, and many of us would probably have been victimized even if the most effective protective measures had been in effect. As we have just seen, state blue-sky laws were in general inadequate. The ancient rule of *caveat emptor* and the common-law rules as to fraud do not meet the needs of the modern situation. Louis D. Brandeis had in 1914 pointed out that bankers and corporations were really working with other people's money. The fiduciary nature of financial and investment processes was becoming increasingly recognized.†

The federal Securities Act. President Franklin D. Roosevelt made the protection of the securities investor the subject of an early message to Congress. As a result, Congress passed the Securities Act of 1933, which, with subsequent amendments, mainly those of 1934, marked a definite step forward in the control of the issuance of bonds and stocks.

Under the Securities Act of 1933 as amended,‡ with certain exceptions, the issuer of a security to be offered to the public in inter-

* *Tenth Annual Report* of the Securities and Exchange Commission, fiscal year ended June 30, 1944, pp. 13-14.

† *Other People's Money and How the Bankers Use It*, by Louis D. Brandeis, has been an important influence in the shaping of public opinion. The following quotation will illustrate the trend of his reasoning: "The goose that lays golden eggs has been considered a most valuable possession. But even more profitable is the privilege of taking the golden eggs laid by somebody else's goose. The investment bankers and their associates now enjoy that privilege. They control the people through the people's own money." (Stokes 1932 ed., pp. 17-18.)

‡ In this discussion no attempt will be made to distinguish between the provisions of the original act and the subsequent amendments. The original act vested the administration in the Federal Trade Commission. The amendment of 1934 turned the administration over to the newly created Securities and Exchange Commission and made several basic changes in the liability provisions of the law. There have been only a few minor changes since 1934.

state commerce or through the mails must file with the Securities and Exchange Commission a registration statement containing a full account of all material facts relating to its financial condition and history.* This registration statement as filed becomes a "public document." The law also provides for the issue of a prospectus setting forth in condensed form the more essential information contained in the registration statement. The prospectus may be filed as a principal part of the registration statement. The reader of the prospectus is often referred to the fuller details as found in the registration statement. Such prospectus must be made available with the offering of the security.

If there is no objection by the Commission, the registration statement becomes effective on the twentieth day after its filing, or on an earlier day if the Commission thinks such acceleration is justified. If the Commission considers the statement to be inaccurate or incomplete, it may, prior to the effective date, call for an amendment or correction. If the statement remains incomplete or inaccurate in any material respect, the Commission may refuse to permit it to become effective. Even after the statement has become effective, the Commission may, after notice and opportunity for hearing, issue a stop order under certain conditions, where there are material misrepresentations or omissions.†

Though the Securities and Exchange Commission carefully scrutinizes the statement within the prescribed or designated time limit, and sometimes calls for corrections and amendments, the law specifically states that the fact that a registration statement goes into effect does not constitute an approval or even an appraisal of the merits or soundness of the security. Nor does it constitute a finding

* The registration statement for domestic securities must contain details as to thirty-two specific groups of information, and that for foreign securities must contain facts as to fourteen points. Among the thirty-two points are balance sheets and income statements; names and addresses of all directors and officers; names and addresses of underwriters and of all stockholders holding more than 10 percent of any class of stock; statement of capitalization; details as to any contract with underwriters or any contract for special services or for patent rights, the uses to which the proceeds of the proposed issue are to be put; salaries paid to officers; the articles of incorporation; legal opinion of counsel; and numerous other details. These statements, including all the special exhibits, become very bulky documents.

† Such stop order issued after the statement has become effective by law is similar in many respects to a "cease and desist order" of the Federal Trade Commission and is subject to review by the courts. See Homer V. Cherrington, *The Investor and the Securities Act*, American Council on Public Affairs, 1942, p. 64.

by the Commission that the statement and prospectus are complete and accurate. The statement or prospectus may still be untrue or wanting in some material respect, and buyers may be injured by such falsities or lack of completeness.

Federal Securities Act and the law of fraud. In the event that the registration statement contains an untruth or omits a material fact which should have been included, an injured security buyer may bring suit for damages against those participating in the issuing and distribution of the security.* The defendant can escape liability (*a*) by proving that the loss in value was caused by forces or conditions other than the falsity or omission in the registration statement; or (*b*) by proving that the purchaser at the time of the transaction knew of the untruth or omission; or (*c*) by proving, unless he is the issuer, that he had withdrawn from his position before the registration statement had become effective and had so notified the Securities and Exchange Commission; or (*d*) by proving, unless he is the issuer, that in relying on his own judgment he had reasonable ground to believe, and did believe, that the statement was true and complete, or, if he signed relying on an expert or on official documents, by proving that he had no reasonable ground to believe, and did not believe, that the statement was untrue or incomplete.

Any person, also, who sells a security which had not been registered but which, by the requirement of the Act, should have been registered or who sells any security through interstate commerce or the mails, by means of a prospectus or by oral communication, which includes untrue statements or which omits important material facts is liable to the purchaser for damages. In such suit the seller can

* The suit may be brought against

1. Every person who signed the registration statement. This includes the issuer, its principal executive officer or officers, its controller or principal accounting officer, and the majority of its board of directors. When such registration statement relates to a security issued by a foreign government, it need be signed only by the underwriter of such security.

2. Every person who was a director or partner in the issuer at the time of the filing of that part of the registration statement with respect to which his liability is asserted.

3. Every person who, with his consent, is named in the registration statement as being or about to become a director or partner.

4. Every accountant, engineer, or appraiser, or any person whose profession gives authority to a statement made by him, who has with his consent been named as having prepared or certified any part of the registration statement.

5. Every underwriter with respect to such security, but an underwriter may not be held for more than the proportion for which he was responsible.

6. Any person who by stock ownership or agency controls any of the above.

defend himself by proving that he did not know, and in the exercise of reasonable care could not have known, of such untruth or omission. The seller may also defend himself by proving that the buyer was aware of the falsity or incompleteness of the statement.

The Federal Securities Act, it will be observed, has made several important changes in the law of fraud as applied to securities. The Act throws upon the originators and distributors of securities the duty of competence and alertness as well as innocence.* The standard of reasonableness is that of a prudent man in the management of his own property. Under the common law, silence or failure to divulge material facts does not constitute an element of fraud as long as the parties are at arm's length—that is, as long as the one is not in a position of trust and confidence to the other—provided the seller is not guilty of actively concealing some latent defects from the buyer. Under the Securities Act, however, the omission of a material fact which should have been included in order not to make the registration statement misleading is admissible evidence.

The provision that the buyer, in order to recover, must be unaware of the falsity or omission at the time of the purchase is an acceptance of one of the common-law principles of fraud. The damaged person may be entitled to recover under the Securities Act, however, even though he never saw the prospectus or registration statement which contained the misrepresentation or omission. It is recognized that the general run of buyer does not read registration statements or even the prospectus. But analysts and investment experts and other men in this line of work do read them. The facts as given, therefore, presumably influence the market and are a factor in determining the price at which the security is offered to the public. Consequently, anyone who pays that price is presumed to have relied indirectly upon the registration statement or prospectus, whether he knows anything about it or not.†

The theory of the law seems to be that, if a purchaser of securities had to prove that he relied specifically on certain parts of the registration statement, he would really have no right of recovery at all. This philosophy, it will be observed, constitutes a distinct de-

* See statement by Associate Justice Charles Henry Robb of the U. S. Court of Appeals of the District of Columbia, in *Martin* v. *Hull* (1937), 92 F. (2d) 208 at 210. 1 S.E.C. Jud. Dec. 390 at 393.

† Statement by Commissioner George C. Mathews at the annual convention of the American Economic Association, Chicago, December 1934, as given in *American Economic Review*, Papers and Proceedings, Vol. XXV (March 1935), pp. 151-52.

parture from the principles of the common law. If the buyer acquired the security after the issuing company has made available an earnings report covering a period of at least twelve months from the effective date of the registration statement, however, this presumption of reliance is overcome. In such case the later information rather than the facts in the registration statement may have influenced the buyer.

The greatest deviation of the Securities Act from the old established common law lies in the burden of proof. In general the plaintiff is not required to show he relied on the statements; rather the defendant must prove that the buyer knew of the falsity or omission of a material fact. The plaintiff is not required to prove *scienter*—that is, he does not have to prove that the defendant had knowledge of the falsity or omission. The defendant, to escape liability, must rather prove in some situations that he had a reasonable ground to believe, and did believe, that the statements were true or complete, or in other circumstances that he had no reasonable ground to believe, and did not believe, that the statements were untrue or incomplete If the issuing company wishes to escape liability in a civil suit, it must prove that the statements or omissions were really not errors or that they are not of an important material nature. The defendants may also attempt to prove that other conditions than the misrepresentation caused the fall in the value of the security.

Criticisms and weaknesses of the Act. Several criticisms have been aimed at the Federal Securities Act. Some authorities argue that even this law does not go to the root of the evil. They maintain that federal control over the selling of securities will remain comparatively ineffective as long as the individual states continue to charter the corporations which issue the securities. Consequently they advocate federal incorporation. These critics point out that federal chartering of all business corporations would eliminate competition among states to lure promoters and prospective incorporators into their jurisdiction by means of special privileges and exemptions.* If all

* In a strong dissenting opinion in *Liggett* v. *Lee* (1933), 288 U. S. 517, beginning on page 541, Mr. Justice Brandeis discusses the competition among states in enacting favorable corporation laws. "The race was not one of diligence but of laxity," concluded Mr. Brandeis. This opinion is "must" reading for anyone interested in a further study of our attitude toward the corporation.

One of the earliest illustrations of the "race of laxity" among states was furnished by New Jersey, which in 1888 liberalized its law so as to permit a corporation to hold stock in other companies for the purpose of control. This provision was later adopted by most of the other states, some of whom, such

companies were subject to the same requirements for obtaining charters, it would be comparatively easy to screen out undesirable corporations and to regulate the corporate structure of those permitted to come into existence. A federal securities act could then function successfully.

The subject is not as easy as that, retort the opponents. What assurance have we that a federal law would be exactly right? Moreover, states may not be willing to give up the chartering of business corporations, a right which is reserved to them under the Constitution. Perhaps a federal incorporation law would be unconstitutional. If this should be the case, some have suggested that a uniform corporation law be passed by the states. It would be difficult, however, to get the states to pass uniform laws which would eliminate their prerogative of offering inducements to promoters and incorporators. It has been much easier to persuade state legislatures to cooperate in the enactment of a uniform law relating to ordinary commercial transactions, such as negotiable instruments and sales, than to get them to adopt uniform statutes which might involve sacrificing or modifying valuable state rights, such as the chartering of corporations or the regulation of marriage and divorce. We are forced to conclude that, though the Securities Act may not go to the root of the evil of security frauds, for the present at least, there is very little chance of achieving uniformity in the process of incorporation under our federal system of government.

It has also been urged that uncertainties in the interpretation of the Securities Act prevent or slow up the issue of new securities. This is a criticism that may be directed against any new law before it has been fully construed by the courts. It is true that the quantity of new security issues fell off following the passage of the Act. But the volume was shrinking even before 1933, and the comparative lack of activity continued long after that year. The low national income could not absorb large issues of new securities. There were other reasons for the lethargy in private investment. One undoubtedly was the uncertainty as to the future of the American dollar. Another influence was the fact that many corporations either were adequately

as Delaware, inserted additional liberal provisions as an inducement to promoters and incorporators. States have frequently advertised in newspapers and periodicals and have issued special literature giving the advantages of their respective jurisdictions as a place in which to incorporate. See an interesting article on this subject by John T. Flynn in the *Atlantic Monthly*, September 1932, entitled "Why Corporations Leave Home." He refers particularly to the points of "attractiveness" and leniency of the Delaware law.

expanded up to the time of World War II, and did not need funds, or, if enlargement and improvement did seem desirable, possessed sufficient liquid resources to finance the new development. Internal financing was adequate to take care of their normal needs.

Some businessmen also showed a tendency during the middle '30's to "let Uncle Sam do it," as the federal government proceeded with its program of deficit financing and public works. Many possessors of funds hesitated to invest and decided to hoard. The "liquidity preference" of the American people became very high. As the government, through borrowing from the banks, expanded investment and purchasing power, private business sometimes not only failed to respond to the stimulus but, in many instances, even curtailed expenditures. The capital market became extremely sluggish.

During the ten-year period ended June 30, 1944, the Securities and Exchange Commission points out, $22,273,000,000 of new corporate securities were offered for cash in the United States. About one third of these, or $7,515,000,000, were exempt from registration under the Securities Act. Approximately one half of these exempted securities were privately placed, many of them with life insurance companies.* Many critics of the Act attribute the large amount of privately placed securities to the desire on the part of issuing corporations to escape the necessity of meeting the registration requirements. The Securities and Exchange Commission, however, maintains that insurance companies were so eager for investment outlets for their funds that frequently, either singly or in groups, they bought entire issues of new bonds. Furthermore, the high-grade corporate bonds had become less attractive to individual investors because of the low interest rate and the high income taxes and the market for such bonds has largely been taken over by institutional investors.†

Doubt has been expressed as to whether the typical investor wishes to take advantage of the protection or opportunity for investigation afforded by the Securities Act. The typical registration statement and prospectus are long and detailed. The typical person likes "quickies" and "short shorts." He is digest-minded and impressionistic. We smile at the gullibility of the investor who, during the South Sea boom about 1720, bought stock in an English company

* A large number of the "exempted securities" were issued by railroads. Though exempt from the Securities Act these were, of course, put out under the jurisdiction of the Interstate Commerce Commission.

† *Tenth Annual Report,* Securities and Exchange Commission for fiscal year ended June 30, 1944, pp. 19-20.

which had announced in its prospectus that it was organized "for carrying on an undertaking of great advantage but nobody to know what it is." But it wasn't so long ago that any broker's office could match the story of the investor who after buying 10 shares of a certain stock came back and inquired of the customers' man whether it was American Locomotive, American Radiator, or American Car & Foundry which he had ordered. People who will not buy a $50 suit of clothes without "shopping around" often throw $1000 into stock without batting an eye.

A difficulty created by the state blue-sky laws has been the tendency on the part of the investor to confuse the registration with a government guarantee. Though the Securities Act imposes a penalty on any dealer who represents that the government has approved any security which has been registered, we may look for some uncertainty in this direction, as the well-guarded use of clever double talk may make it difficult to prove that the impression was really given. Perhaps the buyers "misunderstood."

In a dynamic society there must be new companies and new industries. Not all new enterprises can be successful. Some will be failures. To determine whether they are to succeed, they must be tried. To be tried, they must be financed. To be financed, they must issue securities of some kind. To attempt to prevent the issuance and sale of untried securities would be suicidal.

The Securities Act is not intended to prevent the issue and sale of speculative stocks and bonds. The Act only requires that the full and complete truth be told. It would probably be legal to issue stock to finance a company converting sea water into gold, provided the full truth is clearly told. Such speculative and gambling securities, however, should be acquired only by those who can afford to take a chance. Whether full information will cause untried securities to be channeled into the proper hands remains an open question. No securities act can protect a purchaser unless he chooses to use the information. No securities act can protect a man from his own folly.

Summary. As civilization advances, the amount of liquid claims is likely to increase more rapidly than the value of the wealth. The shift in the emphasis from the purchase of tangible commodities to the investment in securities has had several important effects, chief of which are the diminishing responsibility in the management of one's own investments, the lack of an *esprit de corps* among the holders of securities, the difficulty of investigating the value of one's investment commitments, and the obstacles confronting securities

purchasers in bringing any successful action against the seller in the case of fraud or misrepresentation.

The protection of the securities investor from fraud required the adoption of stronger and more direct legislative measures to overcome the deficiencies of the common law. In succession, we have the federal statute against the use of the mails to defraud, state blue-sky laws, and various other piecemeal bits of legislation. Climaxing the development was the federal Securities Act of 1933. This Act provides that no security covered by the Act can lawfully be issued or sold in interstate commerce or through the mails unless a registration statement shall first have been filed with the Securities and Exchange Commission. The Act also provides for the issuance of a prospectus which is a part of the statement. If the statement contains an untruth or omits a material fact which should have been included to make it completely true, the law specifies certain rules of liability. In some respects these rules amount to a stipulation that the seller is to beware, rather than the buyer, as was the usual case under the common law. An injured purchaser of the securities does not have to prove that the defendant had knowledge of the falsity or omission. In short, the plaintiff does not have to prove *scienter*. The defendant, who may in various cases be the issuing corporation or anyone who had an active part in issuing, underwriting, or disposing of the securities, must prove in some situations that he had a reasonable ground to believe, and did believe, that the statements were true or complete. In some other situations he must prove that he had no reasonable ground to believe and did not believe that the statements were untrue or incomplete. If the issuing corporation wishes to escape liability, it must prove that the statements or omissions were not errors or that they were not of a material nature. In any event the defendant is allowed to defend himself by proving that the securities purchaser actually knew that the statements were untrue or incomplete or that the fall in the value of the securities was caused by other circumstances than the misrepresentation in the registration statement.

The Securities Act has been severely criticized, mainly on the ground that it, like the blue-sky laws, does not get to the root of the evil. Some have suggested that the way to attack the problem of bad securities is through a federal incorporation law. In answer to the charge that corporations under the new Act were afraid to issue new securities because of the harshness of its terms, the point is made that the shrinking amount of new security issues during several

years following the passage of the Act was due to such circumstances as the uncertainty of business, the prevalence of the public-works program, and the increased tendency to place new securities direct with insurance companies and other institutional investors. A difficulty with the Federal Securities Act, as with the blue-sky laws, is the danger of the investor regarding the registration statement and the ensuing "permission" to issue the securities as an official approval of the security. It is also to be doubted whether "quickie" minded people will fully make use of information furnished to them.

PROBLEMS

1. The typical bond indenture of the 1920's and the early '30's had many flaws. What were the main ones?

2. Many trust indentures contained the "ostrich" clause, so called because it provides that the trustee is not to be considered as knowing of a failure to carry out the terms of the contract unless he received notice of such breach from the holders of a specified percentage of the bonds.

What were the disadvantages of such a clause from the point of view of the bondholders?

3. In his book *The Reorganization of Railroad Corporations*, American Council on Public Affairs, 1941, William H. Moore defends the use of the income bond even for normal purposes and questions the advisability of the mortgage bond with its involved indenture and legal documents. What is the purpose of all this alleged protection, Mr. Moore asks, when the security behind the bonds is not the property but the earning power of the company?

Argue for or against the view advanced by Mr. Moore.

4. "The usual security holder in the United States is being reduced to a point where he becomes a petitioner for the wages of capital. He is safeguarded rather by business ethics and policy than by any easily enforceable right." Do you agree with this statement?

5. Globe Aircraft Corporation filed a registration statement for the issue of common stock. The company ran into financial difficulties, and the Securities and Exchange Commission suspended the effectiveness of the statement on the grounds that it contained false and misleading statements and that it failed to disclose certain losses in the Globe operations and certain increases in its liabilities. A critic of the Commission pointed out that the issue should never have been offered to the public even as a speculation. He

then inquired, "What are the stock exchange and the National Association of Security Dealers doing about cases such as these?" The news article finally pointed out that several suits are pending against the president and the chairman of the company and against underwriting houses. (*Time,* Oct. 6, 1947.)

a. Did the SEC actually approve the security?
b. Is there anything in the Securities Act forbidding the issue of speculative securities?
c. What might the National Association of Security Dealers have to do with a situation such as this? (For NASD, see Chapter 24.)
d. Against whom in general may the injured purchasers of stock bring suit?
e. What might the defendants argue in their defense?

6. A financial news item reads as follows:

Provided the federal laws on this subject apply, if the securities to be sold are debt securities, the issues must meet the provisions of the Trust Indenture Act as well as of the Securities Act, but if they are equity securities they must meet the provisions only of the Securities Act.

a. Why does the Trust Indenture Act not apply to equity securities?
b. What are the points of similarity and of difference between the Securities Act and the Trust Indenture Act?

7. Does the Trust Indenture Act of 1939 weaken or does it strengthen capitalism and free private enterprise? Would you arrive at the same conclusion in regard to the Securities Act of 1933?

Chapter 23

Securities Exchanges and Security Transactions

THERE are two ways of trading and dealing in securities: (1) through the organized stock exchange, and (2) through over-the-counter and informal transactions. The organized exchanges are concerned with comparatively few of our total stock and bond issues but they occupy a position of great social significance. We shall, therefore, give special emphasis first to the work and then to the regulation of the stock exchanges.

Characteristics of a market. The market as we know it in economic theory is not merely a *place,* though a place to carry on the functions is necessary. It represents rather a focus of all the influences affecting the supply and demand. If the range of these forces is narrow, such as in real estate, the market may be said to be local. If these influences are far flung, as in the case of those securities with buyers and sellers reacting to numerous diverse forces over wide areas and having accurate and rapid means of communication and shipment at their disposal, we speak of the market as international or world-wide.

If an article is highly standardized, easily graded, reasonably durable, universally demanded, and widely available in large quantities through numerous sellers or potential suppliers, it will in all probability be dealt in on what is called an "organized exchange." * It is no accident that exchanges have developed in various agricultural commodities such as wheat, corn, hogs, rubber, and cotton. Similarly, such exchanges have arisen for trading in securities.

There is a fundamental difference, however, between agricultural products and securities. Agricultural commodities are supplied by thousands and millions of producers and middlemen all over the

* See J. Edward Meeker, *The Work of the Stock Exchange,* Ronald Press, 1930, pp. 36-37.

world. Their available quantity is irregular and ever changing. Crops and harvests are sometimes good, sometimes poor, and are always more or less beyond human control. All this puts a strain and uncertainty on the total supply. In contrast, the total shares of stocks and bonds of a specified company cannot be changed without some positive action on the part of the corporation, such as refunding, or paying, or the issuing and selling of new securities. Even the stock split-up and the stock dividend do not affect the aggregate issue outstanding, for, as the number of shares is increased, the equity of each share is proportionally lowered, and the market price tends also to fall mathematically in an exact inverse ratio with the change in the number of shares. The total book value remains the same, and even the aggregate market value of the shares may change very little.

By an organized exchange is meant an association of individuals, who meet in some regular place in order to deal in designated commodities or securities, both for their own and the accounts of others, in accordance with prearranged rules. If commodities are the subject of such transactions, the exchange is called a commodities exchange; if securities, it is called a securities exchange, or, more narrowly, a stock exchange. Sometimes both commodities and securities are dealt in on the same exchange.

New York Stock Exchange. The New York Stock Exchange, an unincorporated association often known as the "Big Board," is one of the youngest of the major exchanges, making a modest outdoor beginning in 1792. Like several other early established exchanges,* it had its origin in the need for a systematic market for dealing in securities issued by governments or their agencies. A market was considered necessary in the United States for bonds of the newly formed federal government and for the stock of the Bank of the

* Stock exchanges seem to have made a spontaneous growth to meet the needs of industry and finance. As an illustration, we may refer to the London Stock Exchange. This was in continuous existence for many years before its formal organization in 1773 and adoption of a constitution in 1802. Some of the influences behind the rise and growth of this exchange were: (1) the speculative activities in connection with the South Sea Company around 1720; (2) the growth of the great trading companies in England and Holland; (3) the establishment of other business corporations (called joint stock companies) in Great Britain, there being 140 of these in that country about 1800; (4) the chartering of the Bank of England and the increase in its capital stock; (5) the growth of government borrowing through the sale of bonds and annuities. See C. F. Smith, "The Early History of the London Stock Exchange," *American Economic Review,* Vol. XIX (June 1929), pp. 206-16.

United States, chartered in 1791. The founders of the New York Stock Exchange had, of course, a private motive. The first agreement among these brokers, numbering twenty-four in all, contained two pledges or mutual promises: that the members would not buy or sell for anyone at less than ¼ of 1 percent commission on the value, and that they would give preference to one another in their negotiations.*

By 1817 the New York Stock Exchange had grown sufficiently to enable it to move indoors. The development of canal, railroad, industrial, and various forms of government securities gave an impetus to activity on the exchange. The dullest day in the history of the Stock Exchange was March 16, 1830, when only 31 shares of stock were traded in, including 26 shares of stock of the Bank of the United States. It was not until December 15, 1886, that more than 1,000,000 shares were exchanged in one day. A system of "calls" or intermittent clearing of the market was used for many years, but in 1871 a continuous market was introduced.†

The number of members increased over the years through processes reminding one somewhat of changes in the capital structure of corporations. In 1869 there were 533 members of the "Big Board." A consolidation was worked out in that year with two other stock and bond exchanges which had together a total of 527 members, thus increasing the total seats of the New York Stock Exchange to 1060. In 1879 the Exchange "issued" and sold forty new "seats" in order to obtain money to pay for the enlargement of its premises. This made the membership 1100 seats. By then it was recognized that a seat was a property right which could be sold by a member, the purchaser having to make sure, of course, that he had obtained the ratification of the membership committee.

For fifty years, from 1879 to 1929, the membership of the New York Stock Exchange remained at 1100. By 1929, however, the activity on the Exchange had become so great that the association declared a "seat dividend" of 25 percent, each member receiving the "right" to one fourth of a new seat, which could then be sold in conjunction with other rights to make 275 new seats. The number thus

* J. Edward Meeker, *op. cit.*, p. 63.

† Richard W. Schabacker, *Stock Market Theory and Practice*, B. C. Forbes Publishing Co., 1930, pp. 713-14. Under the "call system," trading takes place in securities only when their names are "called out" at specified times. Under the "continuous" system, on the other hand, transactions occur in a stock or bond whenever brokers can get together on a price for the required number of shares to form a unit.

became 1375, which is the present figure. Seats have sold for as high as $625,000, a price paid in 1929.

New York Curb Exchange. The second largest stock exchange in the United States is the New York Curb Exchange. The exact date of its origin is not known, but the Exchange authorities place it as sometime between the California gold rush of 1849 and the Civil War. For many years this exchange was what the name implies, an association meeting on the street curb, with brokers leaning out of the windows or standing outside and obstructing traffic. The work of this exchange increased rapidly, and in 1921 it moved indoors, changing its quarters to its present site in 1931.

The New York Curb Exchange has 499 regular members, in addition to a number of associate members who do not have floor privileges but who are entitled to reduced commissions on their own security transactions. The peak price of a seat was $254,000 in 1929; the low since 1921 was $650 in 1942.* The Curb is considered a "seasoning exchange," but many of the securities listed on it are high class issues. Conversely, many stocks and bonds listed on the New York Stock Exchange are low class. The place of listing gives no conclusive evidence as to the quality of a security.

A typical stock exchange transaction. An organized exchange exists because there is a demand for its services. To describe a typical transaction through the New York Stock Exchange, let us assume that Mr. Smith in Greencastle, Indiana, owns a certificate for 100 shares of common stock of American Radiator and Standard Sanitary Corporation which he wishes to dispose of in order to obtain cash with which to make some repairs to his home. If he already has an account with a commission broker—that is, a broker who executes orders for others—he writes or telephones the broker to ask him to sell 100 shares of American Radiator at the market. Let us say the broker is with the Indianapolis branch office of Jones & Jones, a New York Stock Exchange firm. Though such a "market order" does not specify the price, the selling broker is expected to execute it at the highest price which he can obtain. Mr. Smith's order, designated as a "long sale,"† is wired by the Indianapolis broker to his New

* The number of regular memberships when the association moved indoors in 1921 was 550. In the early 1940's, however, the exchange bought up 51 of the seats and canceled them, reducing the membership to 499.

† The word "long" indicates that the seller has the stock available to be delivered. In contrast, in a "short sale" a person sells stock which he does not own, but which he will have to borrow in order to make the delivery required by stock exchange rules.

York main office. Upon receipt it is immediately telephoned to the stock exchange where a clerk, by a special signaling system, attracts the attention of the Jones & Jones broker, who probably is busy on the floor, and gives him the message that he has an order to sell 100 shares of "American Radiator" at the market. The broker hurries with Mr. Smith's order to the proper booth or stand, which we can refer to as the American Radiator post.*

While Mr. Smith's broker and probably many others have been placing their orders to sell, various other people, differently situated, may have been instructing their commission brokers to buy specified securities. The commission broker representing a buyer is under a duty to purchase the stock at as low a price as possible. Brokers with orders to buy American Radiator also hurry to the appropriate post.

Here we have all the makings of a market. In the midst of the activity a broker, wishing to buy, shouts, "15 bid for 100 Radiator." He is coolly ignored. Mr. Smith's broker then interjects, "Sell 100 Radiator at ⅜ [that is, 15⅜, or $15.375]." He probably figures that the market is bullish or rising and he can hold out for his offer at 15⅜. The buyer also analyzes the forces of demand and supply, and if he feels that the market will tend to be a little weak, he may be tempted to hold out for his bid of 15. Then another broker breaks in, "15¼ bid for 100 Radiator." No one takes him up, but Mr. Smith's broker repeats the offer to sell at ⅜. There are, again, no takers. Then Mr. Smith's broker, yielding a little, calls out, "Sell 100 American Radiator at ¼." One broker rushes to him and shouts, "Take it." The transaction is complete. While others continue their dickering on behalf of their customers, the two brokers we are concerned with make their own memorandums of the transactions, but they do not deliver or receive the securities at the time. An exchange reporter, watching near by, sees the sale take place and reports it at the desk. The facts of the transaction are then put on the telegraph ticker and immediately reported on the ticker tape in brokers' offices everywhere as DT 15¼. (The abbreviation for American Radiator and Standard Sanitary Corporation is DT.)

If the market is very active, our transaction will have been completed in less time than it took to read the description above. In an active market the ticker tape may be continually moving. In the runaway bear markets of 1929 the old style ticker, with a capacity

* By a precise floor plan, stocks are assigned to the various "posts." In this way each broker with an order to buy or sell a cetain stock knows exactly where to go to "find" the market.

of only 300 symbols a minute, was often two hours and more behind. Recently great improvements have been made, and today the ticker, even in active trading, is rarely more than a couple minutes behind the time of the transaction.

We now return to Mr. Smith, the seller. At or about the time he gave his order, he mailed his stock certificate properly indorsed and with his signature properly witnessed, to the Indianapolis broker. The broker then forwards the certificate to the transfer agent, which in our illustration happens to be the American Radiator and Standard Sanitary Corporation itself. The transfer agent cancels this certificate and issues a new one in the name of the broker. This is known as a "street certificate." The broker then indorses the certificate and delivers it to the buyer's broker, who, after having received instructions from his client, sends it to the transfer office. The transfer office makes out a new certificate in accordance with the buyer's instructions. This new certificate, as was also the street certificate, is then authenticated or registered by the registrar, which, in the case of our stock, is the First National Bank of New York. The certificate is then sent to the buyer. This process, as contrasted with the actual buying and selling, may require a week or more.

Possible variations in transactions. The above represents a typical transaction, but numerous variations are possible:

1. The orders to buy and sell were both assumed to be at the market. There may be other types of orders.

2. The order was for 100 shares—that is, a round-lot order. There may also be odd-lot purchases and sales.

3. The seller was "long" on the stock—that is, he actually owned the stock which he was delivering. There may also be short sales.

4. The buyer was to pay in full in cash. There may also be a purchase "on the margin."

5. The transaction was carried on through the exchange. There may also be transactions "over the counter," or "off board" as they are sometimes described.

Let us briefly consider each of these other situations.

1. *Other types of orders.* Our order was a "market order." There may be other forms. There is, for instance, the "limited order." This order specifies a price above which the stock is not to be bought or below which it is not to be sold. Such orders may be good for the day only or for the week or for the rest of the month, or they may be "G.T.C."—good till canceled, often called "open."

We have already referred to the commission broker, who acts as agent for his customers, whether they wish to buy or to sell. As commission broker, his work is not to own securities or to advise their purchase or sale, but rather to take and execute orders. The typical broker's office, with its customers' room, its steady flow of gossip and market reports, its facilities for watching the quotations on the ticker tape and for placing orders, is conducted by a firm of commission brokers, one, at least, of whose members owns a seat on one or more organized exchanges.

If the would-be buyer of stocks stipulates that 100 shares are to be bought at 15—that is, at 15 or below, the order is limited. In our illustration the price of the stock did not fall to 15, but it might, of course, do so. When and if the price does reach 15, the order is "touched off," and must then be immediately executed if sufficient shares are offered at that price to fill all orders.

Had our transaction involved a limited order by either the buyer or seller, or by both of them, we would have come into contact with a broker called a "specialist." As of September 1, 1947, there were 1369 different issues listed on the New York Stock Exchange, and the average commission broker cannot afford to stand around watching the price of American Radiator. His customers are buying and selling other stocks traded at that post and at the other posts, and his inability to be at all posts at the same time gave rise to the function of the specialist. The story is told that, about 1879, a member of the New York Stock Exchange named Boyd broke his leg. Unable to go about the floor actively executing orders for all kinds of securities as before, Boyd decided to remain in one place and to specialize in one stock, Western Union. The decision was a profitable one, and thereafter he limited his activities to specializing in that stock. Other brokers followed suit, and as a result there arose a new group of "specialists." * These specialists do not necessarily limit themselves to just one stock, though such may be the case in busy times, but they do generally confine themselves to shares traded in at one post.

The commission broker refers the limited orders, as well as the "stop" orders which we shall shortly discuss, to the specialist. The

* Charles O. Hardy, *Odd-Lot Trading on the New York Stock Exchange*, The Brookings Institution, 1939, Appendix A (written by a member of an odd-lot firm), p. 162. Some writers characterize this story of Boyd as a tradition or legend, but it could well describe the accidental rise of the specialist group.

specialist arranges them systematically in his "book," so that at any price he can know accurately and immediately which orders are "touched off." He can assume this responsibility because he specializes in comparatively few stocks.

2. *Odd-lot orders.* In our illustration Mr. Smith sold 100 shares. The unit of trading on stock exchanges is generally 100 shares, though a few inactive shares are given a unit figure of 10 shares. Very frequently, however, the customer wants to buy or to sell less than 100 shares—that is, an "odd lot." Assume the order is to buy 50 shares of American Radiator common at the market. (This order could, of course, be "limited.") Instead of contacting the ordinary commission broker on the floor, the New York office will approach one of the "odd-lot dealers." Incidentally, three of these dealers do a great majority of such business. The odd-lot dealer through his broker then watches the transactions carefully at the appropriate post, and when the next transaction in American Radiator takes place, say at 15⅜, he informs the commission broker who is acting for the person who wants to buy 50 shares at market, that he has sold to him 50 shares of American Radiator common at 15½. The commission broker sends a confirmation to the investor to the effect that he has bought for his account 50 shares at 15½ plus the commission and the required taxes. The stock is then paid for immediately or is charged to the buyer's account, as in our illustration of the round-lot transaction, and in due time the stock certificate is made out as directed and is delivered to the buyer.

But, you will ask, how can the odd-lot dealer charge 15½ when the market price was only 15⅜? This differential of ⅛ (one-eighth of $1) represents the odd-lot dealer's gross profit. The same kind of differential also exists in the odd-lot sale. If, in our example, the customer had ordered his broker to sell 50 shares American Radiator common at market, the odd-lot dealer upon the occurrence of the round-lot transaction at 15⅜ would immediately have informed the commission broker that he had *bought* from him 50 shares at 15¼. The commission broker would then have notified the seller that he had sold for his account 50 shares at 15¼. This reduction of ⅛ (or 12½ cents) again represents the gross profit of the odd-lot dealer.

In understanding the function of the odd-lot dealer it is necessary to bear in mind that he is a *dealer,* not a broker. As a dealer, he is the owner of the 50 shares which he sells to the commission broker, charging him 12.5¢ per share above the last-recorded price. As a

dealer, he buys the 50 shares from the commission broker, giving him 12.5¢ below the last price. The odd-lot dealer's gross profit is the difference between the price at which he buys his securities and the price at which he sells them to the commission broker who represents the buyer of the odd lot. Similarly, he makes a gross profit of the difference between the price which he pays the commission broker on behalf of the person wishing to dispose of the shares and that at which he can in turn sell them on the market. Assume that two 50-share orders come to the Exchange at about the same time—the one a buy at market, the other a sell at market—and that the same odd-lot dealer is asked by the commission brokers to handle both orders. If the next round-lot transaction is at 15⅜, the odd-lot dealer immediately, in effect, buys the 50 shares at 15¼ and sells them at 15½.

The odd-lot dealer, therefore, balances his purchases against his sales. Sometimes he may become a little "short" of a certain stock and will replenish his supply by buying in round lots in the general market. Or he may at times become a little "long" and will then dispose of some stock in the market. It will be obvious that the typical odd-lot transaction does not mean a transaction on the floor of the exchange. It is not recorded on the ticker tape. Any transaction in round lots by the odd-lot dealer to build up or to reduce his holdings of shares will, of course, be recorded on the tape. As a general rule the volume of odd-lot trading will follow fairly closely the reported volume in round lots, it being estimated that the odd-lot sales are equal in volume to about one fifth of the total stock exchange transactions.*

In the round-lot market it requires only one transaction to transfer a security from the seller to the investor, this transaction being recorded on the tape. An odd-lot transfer, on the other hand, requires two transactions: first, the purchase by the odd-lot dealer from the seller; second, the sale in turn by the odd-lot dealer to the investor. Both of these go through a commission broker, but neither one is recorded on the tape. When the public is buying great quantities of odd-lots, the odd-lot houses tend to have small inventories on hand or even to be short. On the other hand, when the public is particularly eager to sell odd lots, the inventories of the odd-lot dealers may be large. At times the odd-lot dealers buy more shares than they sell, giving them larger "long" inventories.

* W. Bayard Taylor, *Financial Policies of Business Enterprise,* D. Appleton-Century, 1942, p. 713.

This tendency toward a long position reflects the fact that the public is selling more odd-lots than it is buying. At other times the odd-lot dealers are selling more in odd lots than they are buying, giving them smaller "long" inventories, indicating that the persons interested in odd-lot shares are doing a great amount of investing and speculative buying.*

3. *Short* versus *long sale.* So far we have assumed that the seller actually owned the stock which he wished to sell—that is, he was "long" on the stock. He filled the order by actually delivering the stock certificate to his broker, who then sent it through the proper channels so that it might be canceled on the books of the corporation and a new certificate issued to the buyer.†

Frequently, however, a person desiring to speculate may sell stock "short." He may think, for instance, that the price of American Radiator will fall in the near future. He feels that if he sells the stock short now he will be able to buy it back—that is, "cover"—at a lower price in the future. Such a speculator is a "bear," and his attitude is said to be "bearish." In this case the seller may put up the selling price or, if the rules permit, he may deposit only a certain percentage, giving collateral for the rest. The broker then sells the stock either at market or on a "limited price," according to instructions. ‡ He indicates in his order that it is a short sale. This transaction is put through in the usual way. Let us say the selling price is 15⅜.

* The reader who likes to dabble in figures for odd-lot purchases and sales by odd-lot houses is referred to the statistical tables in Appendix D of Charles O. Hardy, *op. cit.*, pp. 182-86. For three selected weeks, one in 1936, one in 1937, and one in 1938, the three leading odd-lot houses in New York made 121,151 purchases of stocks involving 3,388,535 shares, or an average of 28 shares; and they made 151,606 sales for a total of 3,995,565 shares, or an average of almost 27 shares. The Securities and Exchange Commission gathers complete figures as to round-lot and odd-lot trading. See, for instance, the *Twelfth Annual Report* for the year ended June 30, 1946, Tables 8 to 10A. Earlier figures are given in the *Eleventh, Seventh, Sixth, Fifth, Fourth,* and *Third Annual Reports* by the Commission. See also *Statistical Bulletin* issued monthly by the Commission.

† If a stock is not paying dividends and if the buyer does not care to exercise voting rights, he may accept and keep a bearer certificate or be satisfied to hold one indorsed in blank. Our illustration, American Radiator, is paying dividends, and, unless the buyer intends to hold the stock only a very short time, or unless there are certain tax laws he wishes to circumvent, he will request that a new certificate be issued to him.

‡ A short sale can, according to present rules, be executed only at a price at least ⅛ of a point above the market when the order was placed.

There is an old ditty which reads somewhat as follows:

> Whosoever sells what isn't his'n
> Must buy it back or go to prison.

Though these lines do not correctly state the law, they do suggest the responsibility of the short seller. The seller must indeed "buy it back." As we have seen, he makes the short sale in the hope that he will be able to buy the stock back at a lower price than that at which he sold. The stock exchange rules provide, however, that stock must be delivered generally on the second succeeding day to the broker representing the buyer. Where, then, will the seller get the stock? The answer is that he will borrow it. The selling broker, who carries out these important details, will naturally have made sure that the stock is available. The broker may have the stock himself, or he may borrow it from some other broker, or he may make arrangements to borrow it from some customer who has left the stock with him to serve as collateral for a purchase on the margin. The use of a customer's securities for this purpose requires the consent of the owner.*

When the securities have been delivered to the buyer, his part of this specific transaction is closed. But the short seller must at some time purchase the securities in order to return what the broker has borrowed. Let us suppose that the stock is "accommodating" enough to fall to 13 in the next few weeks. The short seller now decides to take his profit. He orders his broker to buy 100 shares of American Radiator, probably at market. He gets the stock at, say 13, and turns it over to the lending broker to cover or repay the loan. The stock was sold at 15⅜ per share and bought at 13 per share. This makes a total gross profit to the speculator of $2.375 per share or $237.50 on the 100 shares.

If the market price is so "unaccommodating" as to rise, rather than fall, the seller will be in misery. If it rises too much, the broker may be forced to ask for an increased deposit from the short seller.† If the stock persists in its rise, the short seller may be forced

* A loan of money must generally be made by the borrowing broker to the lender of the securities. The question of whether interest is to be charged on such a loan, or whether the lender of the funds is to pay a premium, or whether the transaction is to be "flat" (no interest), depends upon the conditions of the market and the amount of the "floating supply" of the stock. When the stock is returned, this loan of money is automatically repaid.

† We are assuming that short selling on margin for this stock is permitted. Sometimes this practice is not allowed for stock selling below a certain price.

to cover his borrowing. If the stock rises rapidly he may even "rush to cover." If he covers the transaction by buying at $18, he will have lost a total of $262.50 on the transaction, plus all expenses.

4. *Purchase on the margin.* We have just referred to "bears." These men hope or expect the price of a stock to fall. There are also people who look for the price of their stock to rise. They are said to be "bullish." A person may be bearish at one time and bullish at another, or he may be bearish on one stock and bullish on another. The typical small speculator is a bull. Comparatively few of the smaller speculators will make a short sale.

The buyer may attempt to increase his profits (and also his chances of loss) by a purchase on the margin. Under the Securities Exchange Act of 1934 the Board of Governors of the Federal Reserve System was given the power to fix the amount of margin. Though this will be discussed later, it should be mentioned here that various rates have been in effect, and for about a year, from January 1946 to January 1947, the margin requirement was 100 percent, which meant that buying on the margin was not permitted. On February 1, 1947, the margin was reduced to 75 percent. In our discussion we will assume a margin of 50 percent.

A customer wishes to buy 100 shares of American Woolen preferred stock on the margin at 90, and the broker agrees to carry out this arrangement. The customer will pay down only 50 percent of $9000, or $4500. Stock exchange rules require, however, that all stock must be paid for in full. The broker will either advance the balance of $4500 himself or he will borrow it from a bank, which will classify the loan on its books as a "loan to brokers and dealers for purchasing or carrying securities [brokers' loans]." This means, of course, that the buyer's broker will not give the stock certificate to the buyer, but will hold it himself as security for the loan, or if the loan has been made by the bank, he may pledge it as collateral with the lending bank. The buyer will pay interest on the loan. Any dividends paid on the stock while it is held by the broker or by the bank are credited to the buyer.

We are now concerned with an individual whose point of view is quite different from that of the short seller. The short seller becomes alarmed if the stock goes up; the buyer on the margin will rejoice. If the price falls, the short seller will rejoice while the bull will stand to lose.

If a share of stock sells at 90, and the margin requirement is 50 percent, one can, with $4500 cash, get control over 100 shares

of stock. If the stock rises to 105, the shares can be sold for $10,500. After the loan of $4500 is repaid the proceeds are $6000, which leaves a gross profit of $1500 on a $4500 commitment, or 33.3 percent. In a cash transaction, on the other hand, the sum of $9000 in cash would have been required to command 100 shares. The gross profits would then have been $1500 on an investment of $9000 or 16.67 percent. If the speculator had had only $4500 available he could in a 100-percent cash transaction have bought only 50 shares.* Their value would have risen to $5250, making a gross profit of $750 on $4500, or 16.67 percent.

Now let us assume, instead, that the price falls to 75, and the speculator is forced to sell at this price, either because he has decided voluntarily to let go or because he is unable to furnish the extra margin demanded by the broker. For his 100 shares he gets $7500 and takes a loss of $1500. If he had used his $4500 to buy 50 shares outright, his loss would have been only $750. If the price falls drastically, say to 45, the entire amount of the margin on the 100 shares might be completely wiped out, while if the buyer had bought 50 shares outright, a fall in the price to 45 would cause him only a paper loss of $2250, and he would still have the stock.†

A short time ago reference was made to the "limited order" to buy or sell. We come now to certain forms of limited orders devised especially for use in the case of the short sale or a purchase on the margin. There is, for instance, the "stop loss order." A person buys American Woolen preferred at 90. If the price goes down, he may want to limit his loss to a certain figure. In such a case he could order his broker to "Sell 100 shares of American Woolen at 75—Stop." This means that the broker is to sell American Woolen when, and if, the price on the market falls to 75. Such stop orders to sell are placed at a figure below the current price. ‡ When the price reaches 75, the order to sell becomes effective. This does not mean, however, that the stock will be sold at exactly 75. The stock is sold on the next succeeding sale after the price of 75 has been reached, unless prior orders have been filed. In erratic and thin markets the price at which a stock is actually sold has sometimes

* Ignoring the ⅛ additional which would have to be paid on the odd-lot transaction.

† If the price falls steadily and rapidly, the broker would have called for additional margin and if it had not been forthcoming, he would probably have sold out the account long before the price reached 45.

‡ If a person hopes to make a sale above the present price, a limited order would be the thing to use.

deviated greatly from the stop-loss price. In a wild bear market, such as occurred in 1929, the next sale after hitting the stop-loss point could be many points below that figure. Thus the stop-loss order is no absolute protection against loss.

Stop orders of this kind are also used to limit the amount of the loss on a short sale. A speculator who has sold stock short at 90, for instance, may feel that, should the price hit 95, a great amount of quick buying activity might be set in motion. He may be afraid that if he waited to act until that time he might get his order in too late. To speed his covering he could place an order as follows: "Buy 100 shares of American Woolen preferred at 95—Stop." * If the price rises to 95, the order is "touched off," and the purchase is made, unless there are prior orders ahead, on the very next transaction, which may be 95, or above or below that point.

5. *Transactions on the exchange* versus *"over the counter" transactions.* There are nineteen registered exchanges in the United States. Comparatively few of our stocks and bonds, however, are listed on these exchanges. Most securities, even at times those that are listed on the exchanges, are dealt in "over the counter." The key figure in the over-the-counter market is the security house or the dealer bank which may want to buy or to sell certain securities. An individual dealer, after analyzing the market, may try to "make a market" by announcing a price of, say 53 bid for a certain stock and 55 asked (offered for sale at 55). This means that such a dealer will buy stock at $53 and that he will sell it at $55. If, now, he should be able to buy the stock at 53 and then turn around and sell it at 55, he would have a gross profit consisting of the spread between these two quotations. He may, of course, be forced to raise his bid or reduce his offer in order to get customers. If 53-55 are the bid and asked prices for this stock on that day, the figures may be announced in the newspapers as 53 bid, 55 asked. The dealers on the over-the-counter market are strictly merchants, in that they buy and own securities and have them to sell.

The over-the-counter market is used for numerous securities, including new issues waiting to be listed, bonds of most governments and municipalities, stocks of banks and insurance companies, stocks and bonds of companies that are closely held, serial bonds, and

* If the price of the stock is, say 90, and a person wishes to buy if the price hits 85, he would not put in a stop-loss order, but rather would use a limited order, probably G.T.C.

even many listed securities, particularly when the market for them is inactive.

Functions of the stock exchange. This description of some of the more important processes in the buying and selling of securities suggests the chief functions of the stock exchange. The Twentieth Century Fund * summarizes the fundamental functions under three heads as follows:

1. They should produce, through their continuous process of evaluation, prices for securities as close as possible to investment values, based on present and future income-yielding prospects of the various enterprises capitalized at the natural rate of interest.†
2. They should provide ready marketability and reasonable price continuity.
3. As a result of the evaluation process, establishing the rate of return on capital—or, from the point of view of industry, the cost of capital to various types of undertakings—exchanges should facilitate the most productive flow of capital into the nation's economic development.

These three functions may be summarized conveniently as evaluation, ready marketability and price continuity, and proper allocation of funds to the most productive purpose. The fundamental purposes of any market is to evaluate the thing to be exchanged, and to permit and facilitate its movement at the proper time from the person who wants it less to the person who wants it more. Essentially, therefore, a stock exchange should balance the value of funds to those who want them with the value to those who have them to invest.

[Problems will be found at the end of Chapter 24.]

* Alfred L. Bernheim and Margaret G. Schneider, *The Security Markets*, Twentieth Century Fund, Inc., 1935, pp. 31-32.

† If the probable earnings of a certain company as based on average past performance are $10 per share of common stock and if the rate of interest at which they should be capitalized is 8 percent, the theoretical market price of this stock would be $10 divided by .08 or $125. In a computation such as this there are obviously two uncertain and rapidly fluctuating variables: the earnings per share and the interest rate. During a stock market boom a stock might sell on a 2 percent basis—that is, 50 times the earnings per share—while in a period of pessimism the same stock might sell on a 10-percent basis—that is, 10 times earnings. By the natural rate of interest the authors of *The Security Markets* mean a remote or nonexisting, but probably theoretically attainable, rate of interest which would, without the use of bank credit, steer all the available savings into the available outlets.

Chapter 24

Security Transactions and Their Regulation

THE three chief functions of the stock exchange are: (1) the evaluation of securities; (2) the provision of continuity in marketing and pricing; and (3) the facilitation of the most productive flow of capital into business. But, like other social institutions, stock exchanges do not function perfectly. The recurring stock market crashes during 1929-32, with the accompanying and ensuing business deflation, brought to light many evils which had existed for years both within and without the organized exchanges. The Congressional hearings of 1932, 1933, and 1934 and several private investigations revealed many questionable practices which may be broadly classified under three headings:

1. Manipulation and abuse in trading.
2. Inadequate public information on the conditions and practices of corporations whose securities are bought and sold by the general public.
3. Security trading with improper amounts of available credit.

1. *Manipulation and abuse in trading.* Manipulation may take three different forms: the forcing up of prices, the forcing down of prices, and the prevention of substantial movements up or down, that is, the stabilization of prices. There is probably nothing basically wrong with such attempts provided they are done in the proper way and aboveboard. Corporations which are in the process of issuing securities have frequently announced plans to stabilize their price.

Efforts to influence the movement and direction of prices are often made, however, through the dissemination of false information or by various manipulative devices, such as pools, matched orders, and wash sales.* Tipster sheets and half-true "news" items,

* The meaning of the terms pools, matched orders, and wash sales will be made clear in the next few pages.

inadequate or misleading information issued by corporate officers interested in pushing the price of the company's stock up or down, the use by the officers and directors of inside knowledge of company operations to aid them in their market speculations, the issuance of false or incomplete statements for the stock exchange authorities, the carrying on of unfair proxy campaigns, and the attempts by over-the-counter dealers to create false markets or to misrepresent the current prices of stock—these are only a few of the common forms of manipulation.

Manipulation often involves a combination of special "advice" and information and the use of pools and wash sales. One of the most famous trading pools was that in March 1929 around the "new" common stock of Radio Corporation of America.* This pool was organized by W. J. Meehan in cooperation with about seventy participants, most of whom were well known in Wall Street. The newspapers had been deluged with glowing accounts of the achievements and prospects of the Radio Corporation. The merger with the Victor Talking Machine Company had just been completed, and there was much talk of sensational deals. Interest in "Radio" was intense. Trading in this stock was extremely active, the transactions on the Saturday before the pool began its operations being some 400,000 shares or about one fifth of the total trading on this 2,000,000 share day. The price range on this day was 90⅜ to 93½.

TRANSACTIONS OF THE RADIO POOL, MARCH 1929

Date *	Bought	Sold	Total	Net for day †	Cumulative net for day †
March 11..	392,600	246,000	638,600	146,600(L)	146,600(L)
12..	106,900	152,400	259,300	45,500(S)	101,100(L)
13..	69,000	142,800	211,800	73,800(S)	27,300(L)
14..	209,400	186,000	395,400	23,400(L)	50,700(L)
15..	210,500	449,100	659,600	238,600(S)	187,900(S)

* These are the dates of the actual transactions. The table in the Twentieth Century study gives the "ledger dates," the dates "on which the transactions were settled and entered in the brokers' books." The actual transactions occurred the day before the ledger date.

† L—long; S—short.

* In February 1929, the Radio Corporation of America had split, in a 5 for 1 ratio, 1,316,000 shares into 6,580,000 shares.

We can do nothing better here than to quote from the findings made by the Twentieth Century Fund: *

[The table] shows the transactions of the pool from March 11 through March 15. Monday, March 11, the pool began its operations by purchasing 392,600 shares, and selling 246,000 shares. Thus the total transactions of the pool on that day numbered 638,600 shares. This amount substantially exceeded the total number of Radio shares traded in on the floor of the Exchange, reported as 588,200. These operations left the pool long 146,600 shares at the close of the day. Prices fluctuated widely in the course of the session, but at the high were 2½ points above the high of the previous session. The pool had had one day of "accumulation" but had proceeded in a manner hardly in keeping with the usual practices of pool operations.

This period of accumulation, however, did not last long. During the next two days, while prices were somewhat less erratic than on the two previous days and showed a slightly declining tendency, the group bought 175,900 and sold 295,200 shares, thus reducing its holdings by 119,300 shares to 27,300 shares. If the affair had been conducted according to conventional ideas, the pool operation ought then to have been practically completed. The pool had accumulated a substantial block of stock and distributed most of it. But the fact is that on the next day, March 14, it bought 209,400 shares and at the same time sold 186,000 shares, thus adding to its holdings in the amount of 23,400 shares. Prices on that day ranged from 95½ to 100⅞, as compared with the range on the previous day of 91½ to 94.

But the managers of this operation had cut their eyeteeth in such matters. The next day, March 15, with prices ruling firm throughout, they purchased only 210,500 and sold 449,100 shares. That is to say, they disposed of all their long holdings at a profit and went short in the amount of 187,900 shares. Unfortunately the record goes no further. Prices rose violently the next day to a high of 109¾, remained at such levels for the day and then began rapidly to decline. Before the end of the month, when the syndicate contract expired, the stock had touched a low of 82.

* *The Security Markets,* Twentieth Century Fund, Inc., 1935, pp. 478-79. All the data here given in regard to the radio pool including those in the table are taken from this study (pp. 475-83). Chapter XIII, on "Manipulation," is especially recommended to students who wish a thorough account of these practices. Most of the data in the Twentieth Century study were gathered before the passage of the Securities Exchange Act of 1934. The authors make frequent reference to the *Hearings* before a subcommittee of the United States Senate Committee on Banking and Currency on Stock Exchange Practices, 72d Congress, 1st session, S. R. 84. Anyone interested in more detailed discussions of the stock exchange practices in the 1920's and early 1930's is also referred to these Senate Committee *Hearings.*

An outstanding example of a manipulation shortly after the passage of the Securities Exchange Act of 1934 is also worth noting. This involved the Bellanca Aircraft common stock and was carried on mainly by M. J. Meehan, who had been the chief participant in the Radio pool just described. Mr. Meehan controlled 30,550 of the 174,750 shares of common stock of Bellanca Aircraft.

Between June 8 and June 18, 1935, Meehan succeeded in raising the price of that stock from 4 to 5½ by a process of matching orders and broadcasting advice to others to buy the stock. While raising the price, he managed to sell 29,150 shares on the exchange. Moreover, he sold 16,000 additional shares over the counter at $5 per share. Meehan maintained the price of the stock at a comparatively high level from June 18 to October 24 by various legal and illegal transactions, but on October 25 Meehan withdrew his support from the market, and the next day the stock fell to 2¾. As a result of the [Securities and Exchange] Commission's action, Meehan was expelled from the New York Stock Exchange, the New York Curb Exchange, and the Chicago Board of Trade.*

In these accounts of manipulation there are several terms which need explanation. We read that Mr. Meehan engaged in the "process of matching orders." By this practice a person or an associated group instructs one broker to sell a certain quantity of stock and at the same time orders another to buy the stock at the identical price. Both brokers may be innocent of any knowledge of what is going on. These orders may be at prices below or above the actual market, depending on the purpose of the manipulation. The two matched orders are so placed as to reach the floor of the exchange at about the same time. The manipulators intend the carrying out of these "orders" to create an impression of unusual activity on the market and thus to open the way for the fixing of arbitrary prices.

A somewhat related term is the "wash sale." By this is generally meant an agreement by two parties to buy from and sell to each other certain securities in order, again, to give an appearance of great market activity. This type of transaction involves no real change in ownership. It is forbidden by the constitution of the New York Stock Exchange, the penalty for any broker who executes such orders with knowledge of their real nature being expulsion or suspension from membership.†

* *Tenth Annual Report* of the Securities and Exchange Commission, for fiscal year ended June 30, 1944, p. 65.

† In federal income tax procedure, the term "wash sale" is used to designate the selling of a security in order to take a loss and the buying or contracting

For many years the financial community considered it more or less a perquisite of a corporate director or officer to use the inside information at his command to guide him in buying or selling his company's stock. Corporate officers also used the proxy as a way of centralizing the control of the corporation. The stockholder was told very little pertaining to the matters covered by the proxy and the circumstances of the solicitation, such as who bears the costs of solicitation. Incidentally, where management, or a committee selected by it, solicits the proxies, the costs are paid by the corporation.

Evils of manipulation were also common in the over-the-counter market. We have seen that a dealer may announce bid and asked prices of a certain issue, with a spread between the two. Since the over-the-counter market for a stock is often inactive, the ordinary purchaser or seller had little opportunity to check whether the quotation as given corresponded to the actual market. The situation was somewhat similar to that of the farm wife bringing eggs to the store in the olden days in exchange for groceries. Very little communication was available, and the average shopper had little chance to know the actual conditions of the market. The ordinary individual was at a distinct disadvantage both as to the things he bought and as to the things he sold.

Frequently also, both on the exchanges and in the over-the-counter market, the same person acted both as a dealer and as a broker. This double position sometimes gave an opportunity to take advantage of "tempting circumstances."

The corner has been one of the most ancient forms of manipulation. The use of its technique has not been beyond even social-minded politicians in high places. "Squeeze the life out of the shorts and put the price up just as far as you can" was an order attributed to President Franklin D. Roosevelt while attempting to raise the price of wheat. "At about six minutes before closing time I gave them the gun and bought everything the bears offered," said Secretary of the Treasury Henry Morgenthau, Jr.* Had the governmental agencies bought so much wheat that those who had sold

to buy substantially the identical property within a period beginning 30 days before and 30 days after such sale.

* Report by Jonathan Grossman before the American Historical Association (from the diary of Henry Morgenthau, Jr.), from a news item in *The Indianapolis Star,* Jan. 1, 1947. See also Henry Morgenthau, "The Morgenthau Diaries," *Colliers,* Oct. 25, 1947.

found it difficult or impossible to obtain wheat for delivery, the government would have cornered the wheat market.

These statements have, of course, nothing directly to do with the stock exchanges, but they are given here as describing circumstances which might have led to a possible corner. If Mr. Morgenthau had continued "giving them the gun and buying everything the bears offered," and if the bears had continued their attempt to depress the market by insistent and steady selling, the way could have been paved for a corner, by which is meant a condition in which the bears have sold short in such great quantities that they find the available supply either physically inadequate or so closely held by an individual or a group as to jeopardize their chances of "covering" except at a high price. In such events, the holders of the commodity or stock attempt to squeeze the bears in the corner by raising the price just as high as they can without bankrupting them.

The corner has not been a frequent occurrence in the stock market in recent years, but the word even now may give speculators the shivers. One of the most famous corners was that held by Cornelius Vanderbilt in New York & Harlem River Railroad stock in 1863. After he had succeeded in getting control over this railroad, Vanderbilt decided to apply for a franchise to construct a streetcar extension. Certain politicians, aldermen of New York City, were bribed to approve and recommend this franchise. The likelihood of such a permit being granted caused the stock of New York & Harlem Railroad to rise rapidly. The politicians then sold large quantities of New York and Harlem short at a high price in the hope and anticipation that the state legislature, which had the final authority in the matter, would not grant the franchise to Vanderbilt but would give it instead to a competitor railroad. They figured that when the prices fell they could easily cover and make away with the profit.

But Vanderbilt, sly fellow, learned about the conspiracy. He bought up huge quantities of the stock, including that which the shorts were selling. Then, to their consternation, the bears found that the very stock which they needed to cover their short sales was owned by Vanderbilt. Vanderbilt then proceeded to squeeze the bears in the corner, pushing the price up to more than 170. Vanderbilt was merciless. He got 179 for his stock.

Later, the politicians tried to even the score. Vanderbilt wanted to consolidate the Harlem with the New York and Hudson River

Railroad, so he offered bribes to a majority of the members of the New York legislature to pass the necessary consolidation act. The market price of the stock rose in response to the anticipation of a favorable action, but the politicians changed their minds and planned to defeat the consolidation bill at the last minute. They again sold Harlem short, thinking that they would cover when the price fell as a result of the rejection of the application to consolidate. The alert Vanderbilt found out again in time. As the politicians were selling, he bought and bought to such an extent that he "had" 27,000 more shares than the entire existing stock of the railroad. The short sellers were again left in the lurch, and this time Vanderbilt really squeezed, holding out for 285. "We busted the whole legislature," was Vanderbilt's boast, "and scores of the honorable members had to go home without paying their board bills." *

2. *Inadequate public information on the condition and practices of corporations whose securities are bought and sold by the general public.* The problem here is fundamentally the same as that involved when new securities are issued and will not be further discussed here.

3. *Security trading with improper amounts of available credit.* In our discussion of marginal trading, we saw that the funds needed to cover the unpaid portions of the purchase price are provided by the broker. If his own capital is in use for other purposes, the broker or dealer may resort to borrowing. The making of such loans has been the most active and sensitive phase of the money market. Surplus funds of banks, both in and outside New York City, have poured into the market during boom times to be placed in loans which could then be called or demanded when needed. The security broker and dealer proved the ideal outlet for this money. These loans are called "loans for purchasing or carrying securities," though terms such as "brokers' loans," "street loans," and "call loans" are used to designate the portion of these funds advanced to brokers and dealers. These brokers' loans are collateraled or backed mainly by securities which may have been bought on margin, and it could therefore be said that in ordinary

* The facts as to these corners are taken from Gustavus Meyers, *History of the Great American Fortunes,* Random House, Modern Library, 1936 edition, pp. 299-303, and William E. Weld and Alvin S. Tostlebe, *A Case Book for Economics,* Ginn & Co., 1927, pp. 199-201. See also David Marshall, *Grand Central,* Whittlesey House, 1946, chapter on "The Old Man." Many corners are described in Bouck White, *The Book of Daniel Drew,* George H. Doran, 1910.

times the quantity of brokers' loans is an indication of the trend of margin trading.*

The brokers' loans of New York City banks come generally from two sources: banks in New York (their own accounts) and banks outside of New York. During the speculative period of the 1920's, however, a third type of brokers' loan came into prominence, namely, the loan "for others." By this was meant the surplus funds of corporations, investment trusts, and ordinary individuals which were sent to the New York market simply to be lent at call to brokers who wanted money to carry margin accounts. At the height of the stock market boom in 1929 these loans "for others" were almost 60 percent of the total brokers' loans made by New York banks.

The amount of such loans "for others" receded rapidly in the succeeding bear markets. During periods of extremely low interest rates there is little inducement for banks or for others to send funds to New York for use as brokers' or dealers' loans, since the expenses and the commissions to the banks might well eat up all or most of the interest received. The loans "on account of others" involved a special danger to both the banking system and the security markets. They were in effect made between the owners of the funds on the one hand and the brokers on the other, through the banks as intermediaries. Thus, these loans might be beyond the usual banking requirements as to reserves and individual lending limits. Moreover, they were not readily or easily subject to credit controls.

These loans also had a special cumulative and spiraling impact on the security markets. They increased rapidly during the bull market when many corporations which had floated stock at very high prices and individuals who had "sold out" their stocks and had extra cash wanted some place to "invest" these funds subject to quick withdrawal or call. When the crash came, however, these fair-weather suppliers of funds hastened to withdraw them from the New York market, thus precipitating the calling of further loans. The task of filling in the consequent gap in the supply of credit fell on the regular banking system, which, of course, already found itself squeezed. The steps in this chain of events, in turn, aggravated the falling stock market.

* This is not to imply that the quantity of brokers' loans by banks is equal to the marginal accounts or credit extended to the customers by the brokers. Brokers have considerable funds and bank deposits of their own, and may lend to the customer on their own account. Brokers' loans by banks are also backed by United States government obligations as well as by other securities.

Before discussing the important legislative restrictions intended to eliminate the stock exchange evils just described, it is well to mention here that brokers' loans on account of others are virtually nonexistent today. The New York Clearing House, in November 1931, forbade such loans by its members. A provision in the Federal Banking Act of 1933, followed by a similar one in the Securities Exchange Act of 1934, prohibited banks from making loans to brokers for the account of individuals other than banks. As a matter of fact, most of the street or brokers' loans made by New York banks since 1935 have been made for their own account.

These evils of manipulation, inadequate information, and improper amount of credit came to light especially during and following the stock market crashes of 1929-32. Several remedial laws were passed, the most important from our present point of view being the Securities Exchange Act of 1934.

Securities Exchange Act of 1934. The Securities Exchange Act of 1934, as amended in several subsequent years, has three fundamental purposes: (1) to prevent manipulation and unfair practices on the stock exchanges or in over-the-counter transactions; (2) to provide accurate and adequate information on the conditions and activities of companies whose securities are listed on the registered exchanges; and (3) to regulate the amount of credit going into securities trading.

1. *To prevent manipulation and unfair practices on the stock exchanges or in over-the-counter transactions.* The Act requires the registration of, and the maintenance of certain standards by, the national exchanges, now nineteen in number. It forbids numerous practices, such as matched orders, wash sales, the circulation through the mails of false reports with the purpose of influencing quotations of securities, and the pegging or stabilizing of security prices except in accordance with the rules prescribed by the Securities and Exchange Commission. The Act lays down standards of conduct for brokers and dealers in securities, not only providing for the registration and regulation of those who are members of exchanges but also prescribing rules for those who are concerned only with over-the-counter transactions. The extension of the provisions of the Act to include over-the-counter dealings was to be expected. The over-the-counter dealer is not dealing "at arm's length" with his customers. His unique position in relation to the market necessitates making him subject to a high standard of conduct as to the disclosure of essential information. The Act makes

it fraudulent, for example, for an over-the-counter dealer to sell securities to customers at a price bearing no reasonable relation to that existing on the market.

The Act permits brokers to buy and sell unlisted securities on the registered exchanges under the scrutiny and regulations of the Commission. In certain cases the Commission may order the delisting of a security. Delisting has occurred when the issuing company persists in making false or inadequate reports, or where the security loses substantially all its value, or where there has been excessive manipulation, or where for some reason the trading on the exchange does not accurately reflect a reliable or reasonable value of the security.

The Act does not prohibit short selling, but it does provide that such sales shall be carried on only in accordance with rules laid down by the Commission. The law makes certain provisions for regulating or limiting the actions of members of the exchanges who act both as brokers and as dealers. While there has been considerable agitation for the segregation of these functions and though the Commission, as required by the Act, made a special study of segregation, individuals are still allowed to act in both capacities under the scrutiny of the Commission. Odd-lot dealers are also made subject to the provisions of the Act, and the activities of specialists are regulated. A specialist is prohibited, for instance, from disclosing information in regard to orders placed with him unless such information is available to all members of the exchange.

The Act requires each officer and director of a registered company and each owner or beneficial owner of more than 10 percent of any class of its securities to inform the Securities and Exchange Commission as to the number of shares held by him. He must also report any current change in his holdings. If such officer or director or stockholder completes both the buying and selling phases of a transaction in the stock of his company within a six-month period, any profits resulting therefrom are to be turned over to the corporation. The theory of this provision is that profit from a short-term transaction derives from inside information. Corresponding ownership provisions are found in the Public Utility Holding Company Act of 1935 and the Investment Company Act of 1940.

Whenever any person, whether representing the company or not, wishes to solicit proxies, he must follow the regulations set forth by the Securities and Exchange Commission. These rules now provide that the solicitor must name the person bearing the costs and

in whose interest the solicitation is being made and must stipulate the exact matters which are to be voted upon by the holder of the proxy. The proxy statement must also furnish detailed information as to the compensation of the officers and the amount of stock held by the directors.

The Commission constantly watches the price movements of some 6000 different securities, about 3500 of which are dealt in on the exchanges and 2500 are traded over-the-counter. When a movement in the price of a security or in the quantity exchanged does not seem to be explainable by current earning or other corporate developments or by general market influences, the Commission may make a quick preliminary investigation, which it calls a "flying quiz." This often nips the manipulation in the bud. Sometimes, of course, the manipulation may be continued, and the Commission will then make a more extended investigation and analysis in order to locate the culprits and bring out the necessary evidence for their prosecution.

2. *To provide accurate and adequate information on conditions and activities of companies whose securities are listed on the registered exchanges.* The Act prohibits brokers or dealers from carrying on transactions in securities listed on exchanges unless the issuing company has filed a statement of information with the Securities and Exchange Commission. This registration statement must contain complete and accurate information as to specified points. Such information must be kept current—that is, the company must furnish additional statements at least annually, or oftener if demanded by the Commission. This requirement is intended to make accurate and full information available to the prospective purchaser of such listed securities.

Over-the-counter dealers, as well as other dealers and brokers on occasion, engage in transactions in securities which are not listed on a registered exchange and for which the full information required in the typical registration statement may not be available. This gap in the publicity gave rise to special rules of fair practice for these dealers and brokers. Codes of fair practice had been made a part of the National Industrial Recovery Act in 1933 and 1934, but when this Act was declared unconstitutional in 1935 the problem of regulating over-the-counter brokers and dealers again demanded attention. The answer by Congress was the Maloney Act of 1938, which became section 15A of the Securities Exchange Act. The Maloney Act, with some amendments, per-

mitted the formation of associations of brokers and dealers to supervise the conduct of their members. Such associations, acting under the guidance of the Securities and Exchange Commission, are to formulate standards of conduct for their members.

The National Association of Securities Dealers, Inc. (NASD), was formed under this Act. The NASD functions through a board of governors and has had as many as 3000 members. Acting under the general supervision of the Securities and Exchange Commission, this organization has adopted many rules for raising the business standards of over-the-counter brokers and dealers. Some of these regulations are intended to prevent fraud and to require full disclosure of pertinent information. Others have to do with the amount of capital required of a broker or dealer; the proper "mark-up" over the market price which a dealer should be permitted to charge a customer (5 percent seems in ordinary situations to be considered a fair maximum); the relations between the dealer or broker and the customers; the methods of compiling over-the-counter quotations for the newspapers; the determination of penalties for the commingling of securities belonging to customers. All these are designed primarily to maintain the integrity and standing of the securities business in addition to protecting the investor.

3. *To regulate the amount of credit going into securities trading.* The Securities Exchange Act requires the Board of Governors of the Federal Reserve System to prescribe rules for the extension of credit on registered securities and to fix the amount of margin required for the buying and short selling of securities. In carrying out this provision the Board, in practice, designates a maximum loan value, the "margin requirement" being the difference between the market value (100 percent) and this maximum loan value. The same requirements apply to bank loans collateraled by stock. For about a year during the early postwar period, the Board set the loan value at zero—that is, the margin required was 100 percent—but on February 1, 1947, it raised the loan value to 25 percent, which amounts to a margin requirement of 75 percent of the market value.* The Stock Exchange authorities and the Securities and

* The Act laid down a basic initial limit on the extension of credit, which was to be the greater of the two:

1. 55 percent of the current market price of the security, or
2. 100 percent of its lowest market price during the preceding 36 months, but not more than 75 percent of the current market price.

In effect, this meant that the margin requirement was initially placed by the law in the range from 25 to 45 percent of the current market price. This has been changed from time to time by the Board of Governors. The requirement

Exchange Commission have cooperated in the enforcement of the margin requirement, both having the authority to inspect the books and records of brokers and dealers.

A second phase of the limitations of credit extension is Section 8(a) of the Act prohibiting registered brokers and dealers from borrowing from anyone except a member of the Federal Reserve System and except from banks which have agreed to abide by the regulations as to the extension of credit. There are also limitations on the total indebtedness which may be incurred by brokers.

Speculation versus investment. The regulations governing the issuance of securities and market transactions therein are intended to benefit both the speculator and the investor. It is difficult to define exactly speculation and investment, and we shall not attempt to do so here. An individual may be an investor at one time and a speculator at another, even in the same security. To one person a certain stock or bond may constitute an investment, to another a speculation —even at the same time. The basic difference between an investor and a speculator lies in the purpose and the point of view.

Summary. A market serves as a funnel for all the influences affecting the supply and demand of a service, of a commodity, or of a security. By an organized exchange is meant an association of individuals meeting in some regular place to deal either on their own account or for others in specified articles or securities under prearranged rules. The basic transaction on the stock exchange may be said to be a round-lot order at the market price for 100 shares on a cash basis. Variations are the odd-lot transaction and the limited and stop orders. All shares must be delivered at a specified time, but there are short sales, these necessitating the borrowing of the securities with which to make the required delivery according to stock-exchange rules. There may be dealing on the margin, instead of full payment in cash, but since all transactions on the exchange must be on a cash basis, the margin purchaser has his broker arrange a loan on the stock as security. In the use of the limited and stop-loss order and in the odd lot transaction we come across the specialist, as contrasted with the actual trader.

Only a small percentage of the total stocks and bonds in the

for short sales up to 1937 was set at "the same as that customarily required" by the broker, but in that year the Board began to fix positive margin requirements for short sales also, the first figure so fixed being 50 percent. See *Banking and Monetary Statistics,* issued by the Board of Governors of the Federal Reserve System, 1943, pp. 435-36, and Table 145. The current margin requirements may be found in the *Federal Reserve Bulletin.*

country are listed on a securities exchange. Transactions in unlisted securities, as well as at times in those that are listed, take place on over-the-counter markets or through informal personal arrangements.

The chief functions of the organized stock exchange are the evaluation of securities, the providing of ready marketability and price continuity, and the allocation of funds to the most productive purpose. Essentially, a stock exchange should facilitate the balancing of the value of funds to those who want them with the value to those who have them to invest.

These functions have not always been effectively performed. The evils and weaknesses of the stock exchanges are classified as follows: (1) manipulation and abuse in trading; (2) inadequate and misleading public information on the condition and practices of the companies whose securities are listed; (3) security trading with improper amounts of available credit.

Various official investigations of these evils and weaknesses on the exchanges led to enactment of the Securities Exchange Act of 1934 (later amended). The purposes of this Act were to curb manipulation and unfair practices on the stock exchanges and in over-the-counter transactions, to compel the furnishing of accurate and adequate information in regard to companies whose securities are listed on the registered exchanges, and to regulate the amount of credit available for, and going into, securities trading. Under the first of these purposes, the Act requires the registration of the important exchanges and the maintenance of certain standards by them. It forbids wash sales and matched orders and the circulation of false reports, and frowns upon the pegging or stabilizing of security prices except in accordance with rules prescribed by the Securities and Exchange Commission. The Act lays down certain standards of conduct for registered brokers. It also provides for the imposition of controls for the over-the-counter dealer and opens the way to the regulation of short selling. Odd-lot dealers and specialists may only under specified conditions disclose information in regard to orders placed with them. The Act imposes certain restrictions on officers buying and selling the securities of their own company. The soliciting of proxies is closely regulated, and the Commission carefully watches the prices of thousands of shares of stock, often making a "flying quiz" in an effort to detect and prevent manipulation.

Under the requirements for the furnishing of information, the law forbids brokers or dealers from carrying on transactions in secu-

rities listed on registered exchanges unless the issuing company has filed a statement of information with the Securities and Exchange Commission. Over-the-counter dealers are to adopt codes of fair practice. This special requirement is imposed because these dealers are generally concerned with securities which are not listed on the exchanges and for which full information may not be available.

The provisions of the Act regulating the amount of credit going into securities trading authorizes the Board of Governors of the Federal Reserve System to fix margin requirements and to prescribe rules in regard to the extension of credit on securities. The law also prohibits registered brokers and dealers from borrowing from anyone except a member of the Federal Reserve System and except from banks which have agreed to abide by the regulations as to the extension of credit.

PROBLEMS

New York Stock Exchange Data *

Year	Price of membership in New York Stock Exchange		Number of shares traded, in thousands	Number of stock issues listed
	High	Low		
1900	$ 47,500	$ 37,500	138,981	377
1910	94,000	65,000	163,705	426
1920	115,000	85,000	227,636	691
1926	175,000	133,000	451,868	1,043
1927	305,000	170,000	581,702	1,081
1928	595,000	290,000	930,893	1,097
1929	625,000 †	550,000 †	1,124,800	1,176
1930	480,000	205,000	810,632	1,293
1932	185,000	68,000	425,234	1,278
1940	60,000	33,000	207,599	1,233
1942	30,000	17,000	125,685	1,238
1945	95,000	49,000	377,564	1,269
1947	70,000	50,000	253,624	1,379

* Source: Investors Institute of Minneapolis, "Trends in American Progress," 1946 and *New York Stock Exchange Year Book*. The number of stock issues listed are as of the first of the year, except 1947, which is for December 31.

† To February 18. After that day the prices ex-rights were $495,000 to $350,000.

1. *a.* Note the relationship between the volume of share transactions and the price of membership (seats).

b. What is the relationship between the number of shares traded and the general trend of business?

c. Note the relatively small number of stocks listed on the New York Stock Exchange. Where and how are the other stocks in the United States traded?

d. Why is the notation included in 1929 as to ex-rights?

2. The following expressions are extracted from the Associated Press accounts of two days of activity on the New York Stock Exchange early in October 1947:

Short buying buoys stocks.
Sales volume grows as prices advance.
Profit realizing on the week's bulge was present throughout.
Professionals continue to cover short commitments.
The pace was relatively speedy.
The volume crossed the million-share level for the second session in two months.
Offerings in the final hour reduced most advances.
The Associated Press 60-stock composite (October 3) was up .4 of a point at 65.3, a top since September 3. It was the broadest market since September 17; of 1017 issues of stock appearing, 615 rose and 211 fell [the others remaining unchanged].
Bonds stiffened.
At 1947 peaks were Pacific Western Oil, up 4 [and others].
In the "Transactions on the New York Stock Exchange" in *The New York Times* Pacific Western Oil was listed as

	Sales 100s	High	Low	Close	Net Change
Pac West Oil	81	52	$47\frac{5}{8}$	$51\frac{7}{8}$	+4

a. What do these various expressions mean?

b. Were these unusually active days? (Compare with volume of share transactions as found in the preceding problem.)

c. Considering the fact that short interests bought stocks and the volume of transactions rose, did the activity in these days reduce or increase the "short-interest ratio"? (See Question 4.)

d. Approximately what proportion of the shares listed on the Stock Exchange were dealt in on the day mentioned?

3. The following figures are lifted at random from the dividends-announced-this-week section of *The Commercial and Financial Chronicle,* Sept. 22, 1947.

Security	Per share	When payable	Holders of record
Aerovox Corp. 6% conv. pfd. (quar)	37.5¢	10-1	9-16
Allen Industries, Inc., cash			
dividend (quar)...... . .	25¢	10-10	9-29
stock dividend. .. .	100%	10-15	10-3
Central New York Power Corp.			
3.40% preferred (quar)...	85¢	12-1	11-10
Detroit International Bridge... . .	20¢	10-1	9-19
Endicott Johnson Corp.			
common	40¢	10-1	9-25
4% preferred (quar)	$1	10-1	9-25
Hershey Chocolate stock dividend			
(2 additional shares of common for			
each share held)	200%	9-18	9-16
Southern California Gas Co.			
6% preferred (quar)	37.5¢	10-15	9-30
6% preferred A (quar). . ..	37.5¢	10-15	9-30

a. What is meant by the term "holders of record"? Of what importance is this concept?

b. When did these shares sell ex-dividend?

c. When a percentage is given, such as 6% in the case of Southern California Gas Company, this is 6% of what? What are the par values of the Southern California Gas 6% preferred and of the 6% preferred A? (The dividends declared represent the full required amount.)

4. The short interest in stocks listed on the New York Stock Exchange is measured by finding the number of days "at the average rate of trading in the preceding month, which would be required to cover the entire short interest." For instance, if the total number of shares which traders had sold short—that is, the short interest—on a certain day is 1,200,000, and the average daily transaction in the previous month was 600,000, the short interest ratio would be 2.

a. In the interval of one month in 1947 the short-interest ratio rose from 1.591 to 2.006. What could cause this rising ratio?

b. If prices of stocks were to hit what most people believe is rock bottom, what would tend to happen to the short-interest ratio?

5. During the week from March 10 to March 15, 1947, we have the following facts * for the New York Stock Exchange in regard to purchases by customers from odd-lot dealers and specialists and sales by customers to odd-lot dealers and specialists:

	Purchases by customers	Sales by customers
Number of orders....	26,928	20,987
Number of shares....	746,199	599,238
Market value	$30,143,803	$22,559,761

a. Describe the technique of the odd-lot transaction.

b. Did the transactions in this table as such show on the ticker tape?

c. Referring to the transactions only as given in this table for the week, was the supply of stocks held by the specialists and odd-lot dealers tending to become smaller or larger?

d. Suppose a specialist needs to replenish his supply of stocks, how can he do so?

e. On the New York Stock Exchange the unit of trading for most stocks is 100 shares; some less active stocks may have a 10-share unit. On the Curb the unit of trading for a given issue may be 100 shares, 50 shares, 25 shares, or 10 shares. Look through the tables for the stocks traded on the New York Stock Exchange in your daily paper and note under sales (100s) which stocks are dealt in in units of less than 100 shares.

6. A chief purpose of the Securities Exchange Act of 1934 was to increase the information available to traders and investors as to the financial condition and activities of corporations whose securities are listed on the registered exchanges. Why was the Securities Act of 1933 not adequate for this purpose?

7. The *Report* of House Committee on Interstate and Foreign Commerce on HR 9323, the Securities Exchange Bill of 1934, 73d

* Source: *Statistical Bulletin* of Securities and Exchange Commission, March 1947.

Congress, 2d session, House of Representatives, Report No. 1383, p. 5, states:

> Just in proportion as it becomes more liquid and complicated, an economic system must become more moderate, more honest, and more justifiably self-trusting. . . .
>
> When corporations were small, when their managers were intimately acquainted with their owners and when the interests of management and ownership were substantially identical, conditions did not require the regulation of security markets.

a. Do you agree with the views expressed in the *Report?*

b. Would this quotation also express the fundamental reasons for the enactment of the Securities Act of 1933 and the Trust Indenture Act of 1939?

Chapter 25

The Institutional Investor—Commercial Banks, Insurance Companies

THE most important institutional investors are the commercial bank, the life insurance company, and the investment trust.

THE COMMERCIAL BANK

Characteristics of a commercial bank. A commercial bank has three important characteristics.

1. As a member of a banking system, it may be a creator of purchasing power. Through the operation of the device of the "fractional reserve," the banking system can vitally affect the total volume of purchasing power. It can thereby wield an influence upon the credit available for the purchase and sale of corporate and governmental securities, as well as on that available for carrying on transactions in real estate and tangible commodities.*

2. A commercial bank does considerable trading on the equity. The capital stock and surplus accounts, including undivided profits—often called "capital funds" or "capital accounts"—of all member

* A detailed discussion of the intriguing theories of bank expansion of purchasing power would lead us far astray from the present purpose. The student is referred to any of the standard treatises on money and banking. Excellent short discussions will be found in Raymond P. Kent, *Money and Banking,* Rinehart & Co., 1947, Ch. 15; J. Marvin Peterson, Delmas R. Cawthorne, and Philip H. Lohman, *Money and Banking,* Macmillan Co., 1941, Ch. XVI; William H. Steiner, *Money and Banking,* rev. ed., Henry Holt & Co., 1941, Chs. VII, VIII, IX; Rollin G. Thomas, *Our Modern Banking and Monetary System,* Prentice-Hall, 1942, Ch. XVII; and somewhat longer treatment in W. R. Burgess, *The Reserve Banks and the Money Market,* rev. ed., Harper & Bros., 1947; and Board of Governors of the Federal Reserve System, *The Federal Reserve System, Its Purposes and Functions,* 1939, Chs. VI to IX. Those desiring a highly theoretical treatment are referred to Lauchlin Currie, *The Supply and Control of Money in the United States,* Harvard University Press, 1935. The earliest comprehensive treatment, but still a classic, of the difference between the individual bank and the banking system in regard to the expansion of credit, is Chester A. Phillips, *Bank Credit,* Macmillan Co., 1920.

banks of the Federal Reserve system on December 30, 1939, were $5,522,000,000, while the total deposits were $49,340,000,000. This represents a ratio of $8.93 of deposits for each dollar of capital funds. Turning the figures around, we note that the capital funds were about 11.2 percent of the deposits. A percentage of about 10 was considered in normal times about the proper thing. During the war this percentage fell steadily until at the end of 1945, when the deposits were at a high point, the percentage of capital funds for the member banks to deposits was only 5.9. By October 29, 1947, the percentage had risen to 7.1. During this latter interval the deposits fell somewhat while there was a substantial increase in the capital funds, due mainly to the retention of earnings by the banks, but also, partly to the issuance and sale of additional capital stock. There are still many banks that have capital funds equal to only 4 or 5 percent of their deposits.

If deposits continue at anywhere near their current high levels, considerable pressure will be brought upon the commercial banks to issue still more stock. To help along in the process, some of the banks are already declaring and issuing substantial stock dividends. The declaration of a stock dividend does not, of course, increase the total of the capital stock, surplus, and undivided profits, but it does do two things: (*a*) It makes a book transfer from surplus to capital stock. Theoretically the surplus above the requirement of the banking laws could have been paid out as cash dividends, but when surplus is transformed into capital stock, it is no longer available for such distribution. (*b*) Such a stock dividend (it might even be a split-up) reduces the book value and the price of each outstanding share. If the book and market values are high, in the hundreds or even the thousands, such reduction tends to make new additional shares more salable.

3. Most of the liabilities or deposits of banks are payable on demand. The demand deposits, excluding interbank deposits, of all member banks of the Federal Reserve System on December 31, 1946, were about $79,000,000,000, and the time deposits were approximately $27,150,000,000. We may roughly put the proportion as 3 to 1. While the demand deposits are, by their very nature, subject to immediate withdrawal by check, it is probably true that many of the time deposits may also, in effect, be withdrawn without notice.

Because of these three peculiarities, the investment and loan policies of the commercial bank are of great social significance and give rise to special problems in bank management. As a creator of

purchasing power, the bank may have wide effects on our savings, investment, capital formation, and prices. The fact that a commercial bank does considerable trading on the equity through liabilities that are generally payable on demand gives rise to special problems in the management of its investments and loans. The latter problems are of chief concern to us here.

Assets of a commercial bank. In addition to its building and fixtures, a commercial bank has five general classes of assets:

1. Its legal reserves,* which, in the case of a member bank of the Federal Reserve System, must be in the form of a deposit with its Reserve bank.

2. Its operating or working reserves, which include such cash and cash items as checks in process of collection, balances with banks other than the Federal Reserve banks, and any balances with the Federal Reserve banks above those that are required. Any extra balance held with the Federal Reserve banks above that legally required is known as "excess reserves" and may be drawn down at will by the member banks.

3. Its secondary reserves, which constitute a second line of defense. These include such short-term and readily realizable paper as call loans, commercial paper, bank acceptances, United States treasury bills, and treasury certificates.† Sound bank policy dictates that only the highest quality short-term paper be included in secondary reserves.

4. Its loans and discounts, which are notes given by borrowers in return for advances by the bank either in the form of cash or deposit credit. Generally these are for a business purpose, but they may also represent borrowing to take care of consumers' expenditures and to pay for purchases of stocks and bonds.

5. Its investments, which include relatively long-term bonds, normally intended to be held over an extended period. These bonds are issued by governments or by private corporations meeting certain tests often laid down by law. As a general rule, commercial banks may not buy common stock.

Self-liquidation versus shiftability. For years a theoretical controversy was carried on as to the fundamental purposes and characteristics of a commercial bank. According to the "orthodox" theory,

* In commercial banking the word "reserve" means an asset account. See Appendix A, *Surplus and Proprietary Reserves.*

† Both treasury bills and treasury certificates are short term with maturities up to one year. A treasury bill is sold on a discount basis, while the treasury certificate pays straight interest.

such banks should make mainly "commercial loans." By a commercial loan is meant one used to finance a purchase of goods to be resold later in the ordinary course of trade either in their original form or after a short period of manufacture or growing. The resale of the goods should yield more than enough to pay the loan. Since such loans tend to have maturities coinciding approximately with the time of completion of the short-term transaction which they represent, and since they are usually repaid out of the immediate proceeds of the resale transaction, they are said to be "self-liquidating." Purchases and sales of goods normally occur in a steady and rapid succession. A bank making commercial loans, therefore, tends to have reasonably regular receipts and expenditures. It will be relatively little concerned with the deliberate planning and spacing of such maturities.

This orthodox theory is of English origin. It was early carried over into the philosophy of banking in the United States, where it was often disregarded in practice.

Opposed to the theory of self-liquidation is the principle of "shiftability." Its advocates argue that a bank will have its assets in fully available form if it owns paper that may readily be shifted or transferred to other banks, particularly the central banks, or in the United States, the Federal Reserve banks, in return for cash or credit. If such shiftability is assured, a commercial bank may make longer term commitments than are possible under the requirement of liquidity. They may even make investment loans, by which is meant loans to be repaid out of the profits of the enterprise rather than out of the immediate proceeds of the transaction. A loan to a railroad company to purchase a new locomotive, for instance, is an investment loan. Such investment loans are usually for a longer term than the commercial loan, but it is the source of the repayment, rather than the time of maturity, that constitutes the real distinction.*

In the United States, the shiftability theory seems to have been victorious. Under the original Federal Reserve Act the emphasis was laid upon the use of the resources of Federal Reserve banks to aid the financing of commercial loans, generally referred to as "productive credit." A growing belief that any sound paper should be eligible for advances from Federal Reserve banks, accompanied by a need for a broader base of credit, became strong, so increasingly strong,

* See Waldo F. Mitchell, *The Uses of Bank Funds,* University of Chicago Press, 1925, Chs. I to III inclusive, for discussion of these opposing theories. This book was written at the time when there was a decided clash between these two schools of thought.

in fact, that Congress over a period of more than two decades passed a series of amendments to the banking law. These were climaxed by the Banking Act of 1935, which permitted a commercial bank to use practically any prime paper or investment as a basis for borrowing from the Federal Reserve banks. It was realized over the years also that the so-called "commercial loan" was declining in importance and that it might not always exist even in sufficient quantities to furnish or support an adequate supply of currency.* Banks also hesitated in many cases to rediscount an ordinary commercial loan, fearing that if knowledge of the rediscount reached the signer and others, a doubt as to the solvency of the bank might inadvertently be created.

Loans and investment trends. The following table reveals to some extent what has happened to the investment and lending policy of the member banks of the Federal Reserve System.

Loans, Investments, and Deposits of All Member Banks of the Federal Reserve System in the United States, Selected Dates *
(In millions of dollars)

Date	Loans	Investments		Total deposits
		U. S. securities	Other securities	
Dec. 29, 1920...	19,555	2,619	3,357	24,220
Dec. 31, 1929...	26,150	3,863	5,921	37,981
Dec. 31, 1934...	12,028	10,895	5,227	33,848
Dec. 31, 1935...	12,175	12,268	5,541	38,454
Dec. 30, 1939...	13,962	14,328	5,651	49,340
Dec. 31, 1941	18,021	19,539	5,961	61,717
Dec. 31, 1942....	16,088	37,546	5,629	78,277
Dec. 30, 1944...	18,676	67,685	5,208	110,917
Dec. 31, 1946. .	26,696	63,042	6,625	118,170
Oct. 29, 1947....	31,530	59,171	7,282	119,122

* Sources: *Banking and Monetary Statistics*, Board of Governors of Federal Reserve System, 1943, Table 18, and current issues of *Federal Reserve Bulletin*. Certain changes were made in the computation of deposits beginning in 1941 and 1942, but they do not substantially affect the trend.

* See R. C. Turner, *Member Bank Borrowing*, Ohio State University, 1938, pp. 23 and 24.

In 1920 our member banks were largely loan-making banks—that is, they lent directly on the signature of the borrower. Not all the loans, however, were strictly self-liquidating; many of them were for speculation, investment, land buying, and even for consumption purposes. But they were *loans*. The banks rendered a sort of lip service to the orthodox theory at that time. By 1934, however, a great change had occurred. The loans were then in the minority, and investments were in the majority. By 1942 investments had gone still further ahead of loans, with United States bonds in the ascendancy. There was only a slight increase (sometimes a decrease) in the amount of "other securities" which represent mainly bonds of private companies and bonds of other governments than the United States. By 1944, the typical bank had become virtually a "United States bond investment company."

Many forces and conditions account for the relative decrease in the advances of money by commercial banks to private industry either in the form of loans or of purchases of investments. Among these were: (1) the increasing tendency of business to expand through internal rather than external financing; (2) the high degree of liquidity of many private businesses, as represented by a very large excess of current assets over current liabilities (Many industrial companies, beginning in the late 1920's, were frequently lenders instead of borrowers.); (3) the lessened relative need for working capital at various times because of business combinations and because of improvements in transportation, communication, storage, and marketing; (4) the increased financing of private projects even in normal times by the United States government or its agencies; (5) the encouragement of banks to buy United States obligations to help finance the public works program during the 1930's; (6) a realization by the banks that a large volume of United States bonds, carrying a relatively lower interest rate and involving less management expense than loans and discounts, with no losses, might bring in a higher net income than the pure loan business; (7) special provisions during World War II designed to enable and to induce the banks to purchase United States securities.*

* During World War II and the postwar period the Federal Reserve banks stood ready to buy all treasury bills at a fixed rate, to purchase treasury certificates at any time from the commercial banks, to make preferential loans to banks at a very low interest rate based on United States government notes and to buy United States bonds on the open market at any time such step seemed necessary. The deposits in banks (war loan accounts) created when the banks

Our commercial banks will continue to hold huge quantities of United States obligations. This is one of the necessary aftermaths of a great war in which much of the financing was done by bond issues. Shortly after the war, however, there was a pronounced increase in loans and discounts, for business as well as consumer purposes, and a decided growth in the amount of investment by banks in corporation bonds. The extent of this reversal need not concern us here, but we may be sure that United States government obligations will continue for a long time to be the chief outlet for the funds of commercial banks. In the event of a serious business recession, we will undoubtedly again resort to the policy of public works. The accepted way of financing such a program is by "deficit financing," involving the creation of additional purchasing power through the purchase of United States bonds by banks possessing excess reserves. It would, therefore, appear necessary to limit or to reduce the present holdings of such obligations by the commercial banks in order to open the way for further purchases by them in the case of need.

THE LIFE INSURANCE COMPANY

When life insurance organizations operated on the step-rate plan, they had little occasion to invest funds. They collected annually from each insured person only approximately enough to pay the mortality or the chances of his dying that year, plus an allowance for "loading," or expense. A step-rate company collects in net premiums each year the exact amount which, with interest earned during the year, will pay its claims.

For the most part the step-rate plan has been superseded by the level-premium method, generally referred to as legal reserve insurance. Under this system, the insured pays a flat, or a level, premium each year. During the early years the annual premiums paid in by the insured of a specific age group greatly exceeds the probable death claims the company will have to pay on that group, but, as

purchased United States securities, being backed by these securities, were exempted from the usual reserve requirements and from premium payments or assessments under the Federal Deposit Insurance Law. Moreover, in the case of member banks in New York and Chicago, the requirements for reserves on private deposits were lowered.

For a further discussion of the methods by which banks were encouraged during the war period to buy United States securities see the pamphlet, "Our National Debt and the Banks," No. 2, National Debt Series, Committee on Public Debt Policy, New York, 1947, pp. 6-8. This report was written by Dr. Roy L. Reierson of the Bankers Trust Company of New York.

time passes and the mortality rate for the insured rises, the excess becomes smaller and smaller until in later years the annual premiums collected are less than the claims being paid by the company.

The reserve. In the actuarial calculations, the assumption is that the excess of premiums during the earlier years over claims, together with the compound interest, is invested by the company at some agreed contract rate, generally 2.25, 2.5, or 2.75 on recently or currently issued policies. On the older policies the guaranteed or contract rates are much higher, 3 to 3.5 percent being common on those written fifteen to twenty years ago. This excess is actually invested, of course, at whatever return is consistent with safety of principal and the required steadiness of interest income. The excess payments, added to the promised compounded interest, build up a reserve * which is credited to each policy. It is this assumption of a stipulated rate of interest which compels the investment managers of insurance companies to be efficient as well as conservative.

In the "higher" forms of policy, namely endowment, limited payment life, and straight life (often called ordinary or whole life), the policy holder has the right to borrow all, or practically all, of the funds represented by this reserve. If he decides to discontinue premium payments, he generally has several options. He may (1) draw out the reserve and thus cancel his insurance; (2) use the reserve to purchase from the company a paid-up policy of a smaller face value; (3) apply the reserve to extending the same policy for as many years as the amount of the reserve will buy. The premium paid on the private company policy also includes a specified amount for "loading," that is, an allowance for expenses.

The insurance equation. An insurance company receives new funds from two regular and continuous sources: (1) from premiums received from the policy holder, and (2) from the interest on its investments. To these may be added such nonrecurring or irregular sources as profit from the sale of investments and, in the case of stock companies, the amount raised from the issuance of additional stock.

The chief expenditures are for claims, expenses, policy loans, payments of the cash values of canceled policies, and dividends. It is customary to think of claims as death claims. While most claims do take this form, increasing proportions are being paid to living persons as disability payments, annuities, and matured endowments. Referring to life insurance and annuities, if the actual death rates

* The term "reserve" as used in this connection by life insurance companies is a liability. See Appendix A.

are precisely the same as those that have been predicted, if the actual expenses are as computed, and if the return on the investments is equal to that assumed and promised in the policy contracts, the company will come out "just even" and there will be no deficit, nor will anything be left over for dividends or for additions to surplus.

If, however, the mortality is lower than that anticipated or if the earnings on the investment prove to be higher than those expected and guaranteed, or if the expenses are smaller than the figure provided, a surplus will result.* This surplus may be used as a source of dividends to the policyholder in the case of the mutual company, or of dividends to the stockholder in the case of the stock company, or in some instances of dividends to both policyholders and stockholders. The surplus may in part at least be retained as a sort of contingency reserve. Perhaps at another time the mortality may be greater than expected or the interest on the investments smaller than anticipated. In such event the surplus or, what it amounts to, extra reserve, would come in handy.

Tests of investment by an insurance company. Investments of the assets representing the reserves of a life insurance company must meet three tests:

1. Safety of principal.
2. Adequacy and steadiness of return.
3. Proper diversification or ready convertibility and marketability.

1. *Safety of principal.* Life insurance involves a fiduciary and long-time relationship. The funds in many cases may accumulate for sixty or seventy years, or even longer, before they are made available to the beneficiary. They must, accordingly, be conservatively invested. The principal must be safe.

2. *Adequacy and steadiness of return.* It is not sufficient that the management of the funds be conservative. It must also be efficient. As already mentioned, most companies promise a specified rate of interest on their reserve funds during the life of the contract. Investments covering this required rate may be hard enough to find.

* The opposite situations will, of course, tend to bring about a deficit. A large part of the surplus of life insurance companies comes from the fact that many have used the American Experience Mortality Table of 1868 as the basis for computation of premiums. The actual mortality is much lower than that given in these tables. The results for the annuity business will be just the opposite. A lower mortality rate than that provided for in the computations will have unfavorable results for the company. It may be said that life insurance furnishes a protection against dying too soon, while annuities furnish a protection against living too long. Revised tables are being put into effect.

But something above even this contractual rate is always welcome year after year to aid in the building up of a surplus and to permit the "sweetening" of policyholders with dividends which overzealous agents may have all but "promised." The yield must be adequate and steady.

3. *Proper diversification or ready convertibility and marketability.* When insurance companies buy bonds and lend on mortgage security they generally do so with the intention of holding the obligations until maturity. This long-term point of view necessitates not only a diversification of industry, company and type of security, but also a staggering of the maturity dates. The proper arrangement of maturity dates, particularly when the debtor corporations do considerable refunding of their outstanding securities, is a difficult problem. It was estimated that at least one half of the total public utility debt outstanding in the United States in 1940 would fall due in the decade from 1960 to 1970. The continued refunding after 1940 may have pushed this concentration of maturity dates forward into the period 1970 to 1980. Widespread calling of bonds tends to disrupt the insurance company's best laid plans of diversification.

Another extremely important aspect of diversification is emphasized at the present time by the issuance of large quantities of United States bonds and the prevalence of low interest rates, particularly on the short-term obligations. These problems will be referred to in the next few paragraphs.

Increased holdings of United States bonds. Investments by life insurance companies during the period 1906 to 1947 show some interesting trends.* The holdings of United States government bonds rose from virtually none to a 1945 peak of 47 percent of the total. The increased emphasis upon United States "governments" in recent years has been fundamentally due to the relative scarcity of other securities. Even before World War II government agencies were financing numerous private projects, such as the purchase of farms. The Reconstruction Finance Corporation did much private financing. The United States carried on the public works program by money borrowed from the banks. During the war the United States furnished the funds for many emergency war and defense projects. By purchasing United States bonds, the insurance companies, in effect, were helping indirectly to finance American business.

All this means that in many cases private business did not have

* See Appendix M for investments of insurance companies.

to issue publicly held securities. Furthermore, many corporations, as we have already seen, relied almost wholly on internal financing.

An even more important reason for the large purchases of United States bonds by the insurance companies lies in the special need for shiftability and marketability. The companies had learned a lesson from their experience with policy loans. The demand for cash was so great during the stringent days of the early '30's that by 1932 policy loans and premium notes had risen to almost 18 percent of the total invested assets. At the time this meant that the companies either had to dispose of some of their other loans and securities to raise the required cash for the policy loans or they had to defer the making of additional investments with their new money. In either event, the choice was unfortunate for the company, since at the time the prices of even high-grade bonds were at a very low level.

Policy loan problem. Policy loans in 1947 were at the unusually low figure of slightly less than 4 percent of total assets. This relatively small demand for policy loans is the result of the current high level of employment, the existence of large savings, and the fairly ready availability of consumer bank loans and other accommodations to increased numbers of people. Commercial banks, for instance, have been making loans of a type that would ordinarily in the past have been made by insurance companies on the basis of policies. If, however, in the near future, business and employment should lag, or if low-rate bank and credit agency facilities should dry up—in short, if financial and business conditions should again become tight—the policyholders might then resume their reliance on the insurance companies as a source of immediate funds. This would be particularly true if the current savings should be dissipated or prove to be highly concentrated among the higher-income groups.

The assets of 49 legal reserve life insurance companies, comprising about 90 percent of the total for the United States, at the end of 1947 were slightly above $46,000,000,000. The policy loans (including some premium notes) were almost $1,700,000,000, or not quite 4 percent of the total. A quick increase of such loans to, say, 12 percent would bring them above $5,000,000,000, or an increase of more than $3,000,000,000.

The circumstances giving rise to increased policy loans might also cause an increase in the number of surrendered policies. Normally, of course, insurance companies take care of policy loans and forfeiture values by guiding more of the receipts from premiums or from interest into these channels than into the usual loans and bonds. At

a time of such great demand for money by the policyholders, however, new funds might not be coming in quite so rapidly.

In their decision as to the quantity and forms of their holdings in United States bonds, insurance companies are strongly influenced by the current low interest rates. If the current interest rate should rise substantially, the market value of all high-grade, long-term bonds held by insurance companies would fall precipitately. To ward off to some extent the effects of this real risk, the companies are favoring United States obligations, with a fairly large proportion of shorter-term securities in the list. These short-term maturities cannot involve much loss to the owners, since they can generally be collected rather than sold. Upon collecting them, the insurance companies could use the funds so obtained to purchase various other forms of securities yielding a return commensurate with the current higher interest rates. An important troublesome question relates to the amount of support which the Federal Reserve banks will give to long-term bonds in the event of falling market prices.

This problem of convertibility and marketability is aggravated by the fact that many insurance policies contain supplementary contracts according to which the insured may order that, upon the occurrence of the contingency, the proceeds are to be left with the company at a stipulated rate of interest, and that they are then to be paid in installments to some designated beneficiary. If the current low rates on investments continue, these supplementary contracts, written into the agreement perhaps twenty or thirty years ago at a relatively high interest rate, may become of great value to the insured but will mean a corresponding burden to the company. On the other hand, if the current rate of interest should rise substantially above that specified in these policies, the insured might prefer not to have the funds left with the company, or the beneficiary might then exercise his alternative right of withdrawing the principal fund altogether and investing it himself. This withdrawal would probably come at a time when the company's prime bonds, which were bought at perhaps a high price would be selling at a relatively low figure.* Thus, if interest rates remain low, the company may lose; if they rise, the company may also lose.

* See *Legal Reserve Life Insurance Companies*, Monograph No. 28, Temporary National Economic Committee, p. 371, for discussion of the dilemma which may sometime face the insurance companies because of such supplementary contracts.

Mortgage holdings. Mortgages have always furnished an important outlet for insurance funds. In the records they are classified as "farm mortgages" and "other mortgages." Included under the "others" are mortgage loans to city homeowners and to various business companies. Farm mortgages rose in importance as an insurance investment until the early post-World War I period, after which they tapered off in amount and later fell both absolutely and relatively to the total. Several reasons may be noted for this trend away from farm mortgages. The insurance companies foreclosed many mortgages, a fact reflected in the substantial increase in their real estate holdings during the period following 1930. Moreover, the entry of government agencies into farm lending has tended to drive out insurance companies to some extent, at least for the time being. Insurance officials seem also to have anticipated the distressing farm situation that reached its depths in 1929 to 1933, and some years before that time they had begun to reduce their commitments in this field.

The increase of "other mortgages," largely on urban property, on the other hand, showed no letup until the depression following 1929. Even then the downward trend was not so noticeable as it was in agricultural mortgages. The depression did not hit urban land as severely as agricultural land. Since 1936 "other mortgages" have again been on the increase, though the proportion of such loans to the total investment assets has fallen greatly. Increasing entry by the United States government into this field has tended to shift loans to other lenders than insurance companies. The insurance of home loans by the Federal Housing Administration, for instance, has encouraged the making of home loans by commercial banks.

In the year 1946 there was a noticeable tendency to increase the holdings of both farm and other mortgages. One important element in this increase is the higher yield on such mortgages than on the usual corporation and government bonds. Insurance companies are also making an increased number of ordinary unsecured loans similar to the kind made by commercial banks except that they are for longer terms. Wherever the law so permits, the life insurance companies are tending to purchase business real estate, such as stores, factories, and office buildings.*

Railroad securities. Thirty to forty years ago railroad securities were a prime investment and constituted about one third of insur-

* *Business Week,* January 4, 1947, p. 48. See also article "Drop in Yield Hurts Insurers," *ibid.,* June 14, 1947, p. 80.

ance company holdings. Today such securities make up only one sixteenth of the life insurance portfolio. Insurance has grown rapidly since the beginning of the century, while the total railroad mileage has been stabilized. To constitute one third of the life insurance investments today, counting only the 49 companies with 90 percent of the total assets, the investment in railroad bonds would have to total $14,000,000,000, an amount much larger than the entire railroad debt outstanding. Since 1927, the absolute amount of railroad bonds held by insurance companies has maintained a fairly steady level and has even increased a little at times, but the trend relative to the total investments has been downward.

Public utility securities. Investments in public utility companies, on the other hand, have grown for a long time both absolutely and relatively to the total, these being today about $6,750,000,000 for the 49 companies compared with less than $150,000,000 forty years ago. Public utilities have experienced most of their growth during this interval. The absolute increase has tapered off in the past few years, and the proportion of such utility investments to the total fell between 1942 and 1946. The greatly increased amounts of United States government bonds held have been instrumental in changing the proportion that such utility investments occupy to the total.

Other stocks and bonds. The investment by life insurance companies in the securities of corporations other than railroads and public utilities have increased substantially in the last ten years, and particularly in 1946 and 1947. The total now exceeds the holdings of railroad securities for the first time in history. If the present trend continues, in several years they will exceed even the amount of public utility bonds.

The holdings of state, county, and municipal bonds increased absolutely up to 1940, but they have fallen off since that time. These bonds sell at a higher price, that is, at a lower yield, than other equally high-grade bonds because the interest on them has the special advantage of being exempt under the federal income-tax law. The extremely high surtax rates, however, have made such bonds of special value to the investor in the high-income brackets. The tendency on the part of these men to buy such bonds has raised their prices so much that the insurance companies, receiving special treatment under the tax law, have little interest in retaining them, especially when they can be disposed of at a profit.

With the exception of those issued by the government of Canada

and her several political subdivisions, foreign bonds have been looked upon with disfavor by insurance companies since 1921.

Attitude toward common stock. American life insurance companies are generally forbidden by state laws to buy or hold common stock, except where they acquire it by foreclosure or in reorganization proceedings. There are two main reasons for this prohibition. The first is the conviction that common stock is not generally as safe as fixed return securities and is subject to wider price fluctuations. The second has to do with the belief that a life insurance company, like a commercial bank, is theoretically not interested in the purchasing power of its assets. Its liability accounts, consisting chiefly of the reserves, are in terms of dollars. If the assets and income, represented also by dollars, are adequate to take care of all dollar claims and to earn something in addition, the management feels that the company is getting along nicely. An insurance company does not drink, or eat, or sleep. It buys nothing except dollars; it sells nothing except dollars. The purchasing power of these dollars is, therefore, of little concern to the company.

There is, thus, theoretically very little point in a life insurance company owning equity securities, the rate of return on which might rise with a rising price level and compensate to some extent, at least, for the increased costs of living. Some life insurance executives, however, are becoming increasingly concerned over the rising trend of prices. It is true that their investments are in terms of dollars and that their obligations are also in terms of dollars. But interest rates have been unusually low even with a rise in general commodity prices. Moreover, insurance employees are demanding and receiving higher wages, and the expenses of carrying on business are increasing in various other respects. Then, also, a rising price level may affect unfavorably the attitude of the public toward the purchase of annuity and insurance policies.

In general, however, there has been relatively little inclination on the part of the life insurance companies to buy common stock. Some foreign countries, such as Canada, are permitting investments in common stock, but its purchase by American life companies is still generally forbidden. Some sentiment has developed in favor of allowing them to buy and hold common stock. Three arguments are advanced in favor of the proposed change in policy.

1. An insurance company is basically a group of policyholders. These policyholders are interested in the purchasing power of their money. They do eat, and drink, and sleep. The holding of a reason-

able assortment of sound common stocks may open the way for an increase in the value of, or the return on, the investments of an insurance company in times of rising commodity prices. This appreciation or increased yield in terms of dollars will benefit the policyholder, usually through increased dividends.

2. Eligible and available bonds and mortgages are becoming scarce. Life insurance companies are buying a large proportion of the new issues of bonds and notes issued by corporations. In many cases they get together as a group and purchase an entire large corporate issue.* In their frantic search for adequate yield, insurance companies might resort to outlets for their money that are inferior to many sound common stocks. The yield on many good bonds is too low to meet the interest guaranteed by the insurance companies, especially on the older policies. In 1946 the life insurance companies earned a net of only 2.92 percent on their investments and loans, compared with 3.09 percent in 1945 and 5.03 in 1930.† The markets for common stock are the great reservoirs of capital in the country, and it is ironical that these are closed to the life insurance companies.

3. The low yield on good bond investments is encouraging our corporations to raise money by fixed-charge securities when they should do equity financing. Permission for life insurance companies to buy stocks would help improve the capital structure of corporations.

Life insurance investment managers have been lukewarm and even antagonistic to the suggestion that the laws be modified to open up this use for their funds.‡ Their arguments against common stocks run as follows: Life insurance companies hold a somewhat fiduciary

* See *Legal Reserve Life Insurance Companies*, Monograph No. 28, *op. cit.*, p. 364, for a discussion of this trend.

† There were some compensations to the insurance companies. During the period of high farm prices they were able to dispose at favorable terms of most of the real estate which they had obtained by foreclosure in the early 1930's. The high bond market permitted them to sell at substantial profits the high-grade municipal bonds which they no longer wanted because the tax exemption feature had become of no special value to insurance companies. The great increase in the purchasing power of the American people also tended to help the volume of policy sales. The lowered mortality rates have helped the insurance companies in their life insurance aspects, but they have worked against them in the annuity phase.

‡ Insurance companies did not at first welcome the opportunity to invest even in preferred stocks, when the laws were changed to include it among the eligible securities. The general unsatisfactory position of the safeguarding or protective provisions contributed to the hesitancy of the investment committees to select preferred stock. At the present time, however, life insurance companies tend to be more receptive to preferred stock.

position toward their policyholders. Safety is the most important prerequisite for the investments by such fiduciaries. Common stocks, representing the residual claim, have no special legal cushion supporting them. Fixed-rate securities do have such a cushion. Therefore, the insurance executives conclude, they prefer to buy bonds and mortgages. Moreover, stocks represent a managerial interest. An insurance company is concerned with investment, not management of industry. It cannot assume the "responsibilities of becoming collective partners in enterprise." If the policyholders want to speculate or manage business, let them do so directly by themselves, not indirectly through their insurance policies.

The opponents of the common stock as a life insurance investment point out further that one reason most insurance companies came through the depression of 1929 to 1933 in reasonably good shape is the fact that they were holding high-class bonds and mortgages. Even so, these bonds fell in value to such an extent that the state insurance commissioners felt it advisable to permit the companies to use June 30, 1931, values, instead of the market value later existing, as the basis for the evaluation of the investments on their balance sheets. It would have been a calamity, the opponents of the suggested step declare, if the life insurance companies had been loaded up with common stocks in 1931-33. It is easy to remedy overconservatism, but it is difficult to recover from lack of conservatism.*

Impact of the insurance business on our economic system. Life insurance companies have an enormous impact upon our national economy. The premiums collected—which must be invested—amount to $5,000,000,000 per year. As already mentioned, insurance com-

* In 1940 the insurance section of the Securities and Exchange Commission submitted a report on legal reserve life insurance companies to the Temporary National Economic Committee. This report recommended that life insurance companies give more favorable consideration to the investment of their funds in equity securities, in order to stimulate new enterprises and to furnish capital to small and medium-sized businesses. This report, which also criticized other insurance practices, drew an answer from the life insurance companies, which may be found in Temporary National Economic Committee Monograph No. 28A, pp. 3-21.

Incidentally, fire insurance companies, unlike life insurance companies, frequently purchase common stock. The basic difference lies in the great length of time which the reserve life policy may run and in the fact that the company is sure to have to pay. Fire insurance policies, in contrast, generally expire without the contingency having occurred.

panies frequently buy up the entire bond issue of a corporation, and they purchase a large proportion of all new eligible bonds and notes.* The investments of all life insurance companies totaled more than $51,000,000,000 in 1947. This gives these organizations a sort of protective control over probably more than one ninth of our national wealth.† Insurance companies, as large investors, have an important influence upon corporate financial policies.‡

[Problems will be found at the end of Chapter 26.]

* Bonds which may be bought by insurance companies are generally referred to as "legal." This term has, of course, no reference to the legality of the issue. "Nonlegals" are not illegal. Because of the demand artificially created when a bond issue is given the standing of a "legal," such securities will, other things being equal, sell at a higher price, that is, will give a lower yield, than a "nonlegal" of equal quality.

† *Journal of Commerce* (New York), 2d section, on "Education in Insurance," May 15, 1946, p. 20A. At the opening of World War II twenty-six insurance companies held one fourth of the farm mortgages in Iowa and one twelfth of the farm land in that state. The Metropolitan Life Insurance Company was the biggest farmer in the central states, operating in 1940 about 7000 separate farms. During 1937, the Metropolitan harvested 50,000 bales of cotton, 10,000,000 bushels of corn, 5,000,000 pounds of peanuts, and 1,000,000 pounds of tobacco. (Figures on *Legal Reserve Life Insurance Companies*, Monograph No. 28, *op. cit.*, *passim*, but especially p. 348.)

‡ See Stahrl Edmunds, "Outlets for Life Insurance," *Harvard Business Review*, Vol. XXV (Summer 1947), pp. 409-31, for recent summary of investment problems of life insurance companies.

Chapter 26

The Institutional Investor—The Investment Trust

Early development in Great Britain. Great Britain was the first country to experience the full effects of the Industrial Revolution. The increased efficiency of her industries enabled the people to amass huge savings for which they naturally sought lucrative outlets. Because capital was abundant in Great Britain relative to the available outlets, its marginal productivity was low. The British consol, the famous perpetual bond, yielded an unusually small return during the last four decades of the nineteenth century, a low of less than 2.5 percent being reached in the 1890's. Other excellent investments also carried comparatively low yields.

The British people saw that conditions across the seas were different. In the United States, for instance, capital was scarce and its returns were high. The problem became how to transfer capital from Great Britain, where it was less wanted, to the United States and other countries, where it was more wanted. But the owners of funds did not have the courage or facilities to make direct investments. The average investor could not investigate industries, companies, and governments that were several thousand miles away. To diversify his savings adequately among the numerous outlets and types of securities was difficult and expensive. To put them all in one basket and then "to watch the basket" caused too great a drain on his time and energy.

The investment trust, or investment company, as it is often called, furnished the answer to these difficulties. Though this form of organization had been tried earlier, having developed in Holland and France, it did not flourish until the 1860's, 1870's, and 1880's. The chief impetus to its growth came in England and Scotland.* The

* By 1890 there were 55 investment companies in Great Britain. (M. D. Ketchum, *The Fixed Investment Trust,* University of Chicago Press, 1937, p. 18.) Because of bad practices the British investment trust fell into temporary

idea did not really take hold in the United States until the decade following World War I.

The investment trust is a device for the common or cooperative investment of funds. The investor with surplus savings turns them over to the investment company. This, in turn, combines his savings with those of thousands of others and places them in a large number of supposedly carefully selected and diversified industries, companies, and governments. The investment company, rather than the original furnisher of the savings, thus places the funds.

Types of investment trust. As classified in the Investment Company Act of 1940, there are three broad types of investment company:

1. The management type.
2. The unit type—fixed and semifixed.
3. The face-amount-certificate type.

1. *The management type.* The management company is generally a corporation, though it may be an association or a business trust similar to the Massachusetts trust. A promoter organizes an investment company of the management type in much the same way and with the same motives as he would start any other corporation. Like any other corporation, it may be formed for a limited term or in perpetuity. By the provisions of the customary charter, the company may issue common stocks, preferred stocks, and bonds. The management company has frequently done a great deal of trading on the equity. The assets are, of course, mainly securities of various kinds. The board of directors has a broad discretion in the management of the company, in the issuance of bonds and stocks according to the charter, and in the choice of securities to be bought or sold.

2. *The unit type.* This class includes the trusts that are usually referred to as the fixed and the semifixed forms. The organizer is often some investment bank which sets up the original framework, including naming the trustees. This bank then purchases stock (it could be, but seldom is, bonds) of certain selected corporations, often about 28 or 32 in number. Let us say that shares are purchased in each of 32 corporations. If the price range of a stock is low, perhaps 16 shares will be bought for each "unit," while, if it is high, probably only 4 will be purchased. In intermediate price ranges, the number of shares may be around 6 to 12. In this way, the initial investments in the selected companies in a unit will be kept roughly equal. All of these securities, as a group, are referred to as a unit.

disrepute in the 1890's, but it continued in the long run as a popular form of institution.

The purchase price of the securities in such a unit might total, say, $12,000. To this sum are added all brokerage fees and commissions. Allowance is also made for a "loading" charge, which frequently amounts to 9 or 10 percent of the total. This loading charge is intended to cover all the expenses and costs of the trustee.

Let us assume the aggregate of commissions, fees, and loading to be $1500. The total cost of the unit is then $13,500. Against this unit the sponsors issue 1000 certificates of trust, each of which is offered at $13.50. The sponsors may make up as many units now or later as the demand requires. The offering price of the certificates issued in the future will vary with the aggregate prices of the stocks going into the unit at that time. The market price of oustanding certificates will fluctuate closely with the current value of the securities on which they are based, that is, the assets of the trust.

This organization is not a corporation. It must have a clearly defined term, as limited by the common law and statutory rules relating to trusts. It can issue only one kind of security—the certificate of trust. In the fixed trust the trustee can hold only the specified securities named. If certain "conditions of elimination" for a stock occur, such as a lapse of dividends, that security must be sold and the proceeds distributed to the certificate holders. The trustee is not permitted to substitute new stocks for those eliminated. Thus, while a trust might start with a certain list of securities in the portfolio, this number could be reduced.

The holder of such a trust certificate may redeem it at any time for the proportional amount of shares actually held on his behalf by the trust. If the amount involved happens to be too small, say less than a share, he will be given cash. In our illustration the holder of 250 certificates could demand one fourth of the shares held in the unit. The trustees are limited by rigid rules as to the distribution of all cash received, even as to the disposal of stock dividends. In the accumulative type of trust such stock dividends may be held as extra assets; in the distributive type they must be sold and the proceeds paid to the certificate holders.

The holders of trust certificates are to have a minimum of control in the management—really no control at all. The holder of a certificate in the unit has merely "an undivided interest in a package of specified securities held by a trustee or custodian." At the end of the designated term the trust must be dissolved and the assets distributed. If at that time the certificate holders wish to continue the

relationship, they may initiate a new trust. A perpetual trust is not allowed under common and statutory law.

In the semifixed trust, as contrasted with the fixed trust, the trustees have more power and discretion. They may, for instance, substitute new securities for those eliminated. Semifixed trusts are also known as "limited management" trusts.

3. *The face-amount-certificate type.* The investment trust of this type, generally a corporation, distributes certificates which provide for the payment of a fixed amount at maturity. The company also promises to settle on demand before maturity according to a specified table of "surrender values." The certificates issued under this plan are debts, not shares of stock. The holder is a general creditor. He has no claim to any specific securities. Because the face amount of the certificate represents a liability, this form of trust generally has elaborate provisions for building up reserves. The certificates are generally sold to the public on an installment payment basis.

The investment trust in the United States. The rate of mortality among investment trusts has been very high. Not quite one half of the trusts that came into existence between 1927 and 1936 survived to the end of that period. The management trusts seem to have had a better chance of survival than the fixed and the semifixed.* This is true in spite of the fact that the stock market crash of 1929 stimulated the use of the fixed trust, which had a phenomenal growth from 1929 to 1932. At the present time, fixed trusts are almost nonexistent in the United States. The management trust is today the most common, but there are a number of illustrations of the "mutual investment trust" which seems to be an adaptation of the unit fixed form, with greater power to the management.†

* According to the *Report* of the Securities and Exchange Commission on Investment Trusts and Investment Companies, House Document 707, 75th Congress, 1st session, Part I, p. 4, there were 1272 investment companies in existence at some time during the period 1927-36. Of these, 970 were management companies and 225 were fixed and semifixed. Only 559 were still active at the end of 1936. Of these, 404 were management and 87 fixed or semifixed.

† There are numerous forms of investment trusts. We have classified them into management, unit (fixed and semifixed), and face-amount certificates. If the securities are redeemable by the holder, it is an open-end trust; if they are not redeemable, it is a closed-end trust. The fixed and semifixed are automatically open-end; the face-amount installment is limited open-end; while the management may be either open- or closed-end. The mutual type, which developed in the 1930's after the decline of the fixed trust, gives broad, general, and continuous powers of management to the trustee. As in the case of the fixed and semifixed trust, the mutual trust has outstanding only one form

The high mortality rate of the investment trust has a historical background. This form of organization was all but unknown in the United States until the early 1920's. As we have seen before, the government's bond campaigns in World War I had acquainted people with the technique of securities transactions. Capital accumulations were large, and savers were seeking new outlets. Like our European cousins of a half century before, we were now looking for higher returns on our money. The English and Scotch had turned their eyes outward overseas, but we turned our eyes inward. We sought new domestic securities.

The new-era philosophy of the common stock gave form to this yearning for easy profits. The researches of Edgar L. Smith, showing statistically that over a long period of years common stocks had proved to be a superior investment to bonds, fired the public's imagination. To make a good "investment" it was necessary only to pick out a "good stock," regardless of its price, and hold onto it until the market value had risen enough to yield a sure and substantial profit. Whether this stock sold for ten times earnings or fifty times earnings made little difference. It was sure to rise, provided the upward trend of earnings were maintained. The rate of dividend was not important; in fact, a stock of a company accumulating a large surplus was considered a superior form of security.*

of security, the trust certificate, and the certificate holders may withdraw at any time, receiving in cash or securities the proportionate share of the then existing values. The Investment Company Act of 1940 gives a classification of trusts which is followed in the text material above. Because of the varying provisions, probably no two investment trusts are alike.

For a short but workable description of the various classes of investment trusts see *Seventh Annual Report* of the Securities and Exchange Commission, fiscal year ended June 30, 1941, pp. 7-9.

* Mr. Smith, in his *Common Stocks as Long Term Investments,* Macmillan Co., 1924, made hypothetical investments of $10,000 in ten arbitrarily selected, well-diversified common stocks of large companies. He then made an equal investment in high-grade bonds. He made a total of eleven statistical tests for the periods 1866-85, 1880-97, 1892-1911, 1901-22, 1906-22. In all the cases except one, that from 1866-85, the common stocks showed an advantage over the high-class bonds, not only in the amount of appreciation of the principal but also in the total amount of return on the investment.

This advantage of a group of well-diversified common stocks results from the holding back of a part of the earnings. The surplus so accumulated will tend to increase in accordance with the operation of compound interest and thus cause a steady rise in the value of the stock. (Smith, *op. cit.,* p. 79.)

The common stock theory as presented by Mr. Smith has several limitations: (1)the theory assumed a continuous and steady growth of industry. Only if this is true can the surplus be profitably invested by the corporation. As a

Blunders of American investment trusts. The American investment trusts, which at first were predominantly of the management type, struck hard at the bait of the common stock. They made many errors of the same nature as those committed by the Europeans in the 1870's and the 1880's, but they added others of a peculiarly American flavor.

The chief blunders made by the American investment trusts may be summarized.

1. *The management trusts did too much trading on the equity.* The higher the degree of trading on the equity, the greater is the possible gain to the common stockholders, but also the larger is the possible loss. A survey of the principal investment companies, excluding the Atlas and Equity groups, revealed the condition shown by the composite balance sheet on page 480.

A fall of 50 percent in the value of the common stock held in 1929 by these companies would eliminate most of their common-stock equity. The crashes of 1929 and subsequent years did wipe out the asset value behind the common stock of some investment companies and at times much of that behind the preferred stocks and bonds. In a number of instances, also, the fall in income from divi-

matter of fact, soon after the enunciation and wide acceptance of this theory the trend of business began to fall. People began to talk about the saturation point. (2) If everybody believes this theory and acts accordingly, the market price of the common stock may rise so rapidly as to take away the theoretical advantage of a common stock bought at the time of such high prices. In the bull market of 1928-29 many stocks sold for 40 or 50 times their earnings. It will take a good long wait to bring the common stock of United States Steel, for instance, back to its 1929 level. (3) The theory ignores the fact that the typical investor might not have hung onto his stock during the period studied. For instance, a group of stocks from 1901-22 showed a total advantage of $16,400.94 over high-class bonds. So many "scary" things occurred during that twenty-two-year period, however, that most investors might have disposed of their stocks long before 1922. The typical person might well have "got out" during the bear market of 1903, or 1907, or 1914, or 1917, or 1921. Or in any of the upward movements he might have taken his profit. In short, the investor who had bought those stocks in 1901 might have forsaken them long before 1922.

For analysis of the common stock theory, see Benjamin Graham and David L. Dodd, *Security Analysis,* McGraw-Hill Book Co., 1940, Ch. XXVII; Chelcie C. Bosland, *The Common Stock Theory of Investment, Its Development and Significance,* Ronald Press, 1937; and George W. Dowrie and Douglass R. Fuller, *Investments,* John Wiley & Sons, 1941, pp. 133-38. Alfred Cowles and associates in their book, *Common Stock Indexes* 1871-1937, Principia Press (Bloomington, Indiana), 1938, also make a significant contribution to this subject.

ASSETS (value in millions)	1927*	1929*
Liquid assets	$ 37	$ 282
Bonds	63	106
Preferred stock	45	107
Common stock	220	1,142
LIABILITIES (value in millions)		
Current liabilities	31	68
Bonds	69	158
Preferred stock	113	581
Common stock and surplus	184	971

* Gathered from House Document No. 70, 76th Congress, 1st session; being Part II of the *Report* of Securities and Exchange Commission on investment trusts and investment companies, pp. 131-32.

dends was so severe that the companies failed to pay preferred dividends and in some cases even the interest on the bonds.

2. *Investment companies were often guilty of unsound or unwise accounting and financial practices.* Some of these exaggerated the income and thus encouraged and permitted the distribution of too large dividends. Companies not infrequently credited gains from the sale of securities to the income account but charged losses from such sales to surplus.*

Sometimes a trust "sold" securities to an affiliated company and credited any gain from such transaction to profits. These profits were often paid out as dividends, in spite of the fact that real profits can come only from dealing with outside, independent individuals.

3. *Many management companies engaged in financial manipulation.* Managers of a few investment trusts used their companies for their own personal ends. Mr. Cyrus Eaton, for instance, according to a report by the Securities and Exchange Commission, used his management trust, Continental Shares, Inc., as a method of borrowing money in order to rescue an investment firm of which

* House Document No. 279, 76th Congress, 1st session, which is Part III, Ch. VI, of the *Report* of the Securities and Exchange Commission on investment trusts and investment companies, Appendix K, pp. 2409-19. This Appendix contains numerous illustrations of bad accounting practice. The Adams Express Company, for instance, from 1928 to 1930 added (credited) realized profits from sales of securities to income but in 1931 to 1933 it debited losses from such sales to its earned surplus account.

he was a partner.* He also used the resources of his trust to help prevent the Bethlehem-Youngstown merger.†

Investment banks often organized and sponsored trusts for their own gain. Frequently they sold the securities which they had underwritten to their own sponsored investment trusts. Managers and officers of trusts have been known to shift securities between their private ownership and the trust's portfolio, giving themselves those securities which proved successful and turning over to the trust those which proved inferior.

When the control of a certain investment trust passed to a new group, the assets, consisting of about $2,500,000 worth of securities, were bodily transferred in one swoop from a vault box to the new location. A portion of the testimony runs as follows: ‡

> Q.: In any event, when you got there the securities were on the table and you counted them?

* Cyrus Eaton was principal partner in Otis and Company, member of the New York Stock Exchange. He (with his wife) owned 26 percent, which was a controlling interest, of the stock of Foreign Utilities, Ltd., a holding company. In 1926 he organized Continental Shares, Inc., a closed-end management trust. When Otis and Company got into financial difficulties, the New York Stock Exchange warned the firm that unless it replenished its capital its membership in the Exchange would be canceled. Mr. Eaton, in order to raise additional funds for Otis and Company, then caused Foreign Utilities, Ltd., to sell a large block of its securities to Continental Shares, Inc. To raise the necessary cash, Continental Shares borrowed $35,000,000 from two banks, turning over to them the purchased securities as collateral for the loans. Continental Shares used this money to pay Foreign Utilities, Ltd., which then advanced enough to Otis and Company to pay off its immediate indebtedness and to add to its available funds. Later Continental Shares, Inc., was unable to repay its bank loans and the banks foreclosed on the collateral. If Continental Shares, Inc., had not borrowed this money, it might have been able to survive the depression. See House Document No. 136, 77th Congress, 1st Session, being Part III, Ch. VII, of the *Report* by the Securities and Exchange Commission on investment trusts and investment companies, pp. 2616-21.

† In 1930 Bethlehem Steel Corporation was interested in acquiring control over and merging with Youngstown Sheet and Tube Company. Mr. Eaton, an ardent Ohioan, opposed the domination of this Buckeye corporation by eastern capital and he attempted to get control over enough shares of Youngstown to prevent the approval of the merger. Mr. Eaton swung his investment companies, Continental Shares, Inc., and Commonwealth Securities, Inc., into action and had them buy up Youngstown shares. These purchases helped to drive the price of Youngstown up to $148 per share, a near high. Later the price fell drastically, causing a large loss to the investment trusts. Mr. Eaton also brought court proceedings to prevent the merger, a great part of this legal bill being paid by Continental Shares, Inc. House Document No. 136, *op. cit.*, pp. 2625-27.

‡ House Document No. 279, *op. cit.*, p. 388. There was apparently nothing wrong with the transaction just described. It is given here merely to show the ease with which it would be possible to transfer and manipulate the

A.: Yes.
Q.: And what did you do with them afterward?
A.: Called the messenger up and put them in a bag and brought them into the office.
Q.: Just put two or two and a half million dollars worth of securities in—what was it, a valise?
A.: No; a large bag.
Q.: And then went off with it?
A.: Yes.
Q.: And you didn't know you had an investment trust in your valise, did you?
A. No; I didn't.
Q.: Perfectly oblivious to the fact that you were taking an investment trust through the Hudson Tube, or was it by the Ferry?
A.: Through the Tube.
Q.: Did the investment trust get into one valise? I am curious how you move an investment trust from one city to another.
A. They have a bag about that high and that wide.
Q.: A regular—
A.: Two men carry it, a regular canvas, leather bag.

Investment companies in some instances bought securities for the purpose of control rather than as a mere investment outlet. Frequently pyramids were formed. Loans to officers were common. The management trusts were often controlled by insiders and minority groups through the use of numerous techniques.* Practically all common stocks of management investment trusts had been deprived of the preemptive right.

4. *The typical management investment trust was more interested in the appreciation of the value of the securities than in the income.* It emphasized nonrecurring profits, such as those from the sale of securities, rather than recurring or continuous income, such as dividends and interest. Great stress was always placed upon "liquidation value"—that is, the value of the amount allocated to each share of common stock in the case of dissolution of the company.

securities and security accounts of an investment trust. The assets are mere pieces of paper.

* "By various devices of control, such as special voting stocks issued to distributors and managements, voting trusts, long-term management contracts, control of the proxy machinery, and pyramiding of companies, public investors [in investment trusts] were effectively denied, in many instances, any real participation in the management of their companies." From *Tenth Annual Report* of the Securities and Exchange Commission, fiscal year ended June 30, 1944, p. 159.

The emphasis upon liquidation value is perhaps proper in a fixed trust and in the open-end trust where the actual securities or their value at the time may be demanded by the holders of the certificates or of the shares of stock. It is also more appropriate where there is no trading on the equity. The high degree of trading on the equity carried on by many management trusts, however, tends to make the liquidating value a highly fluctuating and unreliable test of the value of the common stock outstanding. This is particularly true when the assets in the portfolio are predominantly common stock.

During the period from 1926 to 1929, when the management investment company was especially flourishing, common stocks rose to such an extent that in many instances their yield became lower than that earned on bonds of the same company or of a comparable risk. The student should picture to himself, then, this rather typical situation at the time: An investment company has outstanding a large proportion of bonds and preferred stocks. The coupon rate on the bonds is around 5 or 5.5 percent. The dividend rate on the preferred stock is often 6 percent. The assets are mainly common stocks, and the return on them is in the neighborhood of 5 percent!

Such a company could not avoid financial difficulties. Investment companies consequently were tempted or even forced to emphasize the appreciation in the value of their assets rather than the income from them. When stock prices crashed in 1929 and continued their general downward course for some three years, many investment trusts found themselves in trouble. They had gambled on a continued capital gain over a period of years, but "vanishing returns" set in.

The fixed and semifixed trust was not popular during the 1920's. After their bitter experience with the management company, however, many investors turned to the unit type. The relatively few fixed trusts in existence had fared better in the market crash than the management companies. Since there was no leverage, the liquidating values of the certificates had moved with the values of the assets. The fixed and semifixed trusts became very popular during 1930-32, but later the swing was again toward the management form, particularly the open-end type. Large quantities of face-amount certificates were also sold after 1930.

Regulation of investment trusts—Act of 1940. The abuses and weaknesses of investment trusts led to investigations by various governmental agencies, the most important being that by the Securities

and Exchange Commission, made in compliance with a provision in the Public Utility Holding Company Act of 1935. This report led directly to the passage by Congress of the Investment Company Act of 1940. Even the investment trusts themselves were eager to have their business regulated by a national law.

The Investment Company Act of 1940 compels investment companies to register with the Securities and Exchange Commission and to furnish complete information similar to that required of corporations issuing securities under the Securities Act. A company's broad investment policy must be clearly described, and it cannot be changed without the approval of the stockholders. The relationships of trusts with affiliated companies, underwriters, investment bankers, and brokers are carefully regulated to prevent conflicts of interests. These individuals, for instance, cannot control more than a minority of the directors of investment companies. A minority of the board of directors must be independent of the officers. The securities owned by a trust must be deposited with an authorized custodian or trust company. The Commission has the power to require uniform accounting systems, and to regulate the issuance of securities by an investment trust. The act of borrowing is especially subject to scrutiny. Investment companies must make regular reports, at least semiannually, to stockholders. All face-amount-certificate companies must maintain adequate reserves to provide for the payments at maturity. The full text of all sales literature must be filed with the Commission.

Role of the investment trust. At the close of the fiscal year ended June 30, 1946, 361 active investment companies were registered. Their total assets were $3,750,000,000.* The great majority of the trusts registered were of the management type. In 1942 these amounted to 96 percent of the total number.†

The investment trust, in theory, is designed to facilitate diversification, to furnish a specialized and informed management, and to provide a medium for the detailed and careful selection of securities. But the trust has not always performed these functions any more effectively than could the alert investor acting alone. Experience with the investment trust has emphasized certain qualifications and shortcomings.

* *Twelfth Annual Report* of the Securities and Exchange Commission for the fiscal year ended June 30, 1946, p. 99.

† *Eighth Annual Report* of the Securities and Exchange Commission for the fiscal year ended June 30, 1942, p. 32.

1. *The managers and originators of investment trusts even in their heyday did not make a superior record of selection and management.* Records compiled by the Securities and Exchange Commission indicate that in the years 1927-37, a period of great ups and downs in stocks and bonds, the typical closed-end management company did no better in respect to return on investment than an "unmanaged" fund represented by an index of 90 common stocks.*

The market performance of the securities held by the fixed and semifixed trust during the 1930-35 period was about 10 to 15 percent below that of the index of 90 common stocks. This was slightly inferior to that of the management trust.† In this connection it must be remembered that the loading or expense charge of the average unit trust amounted to about 9 percent of the cost of the securities. In addition there was often a so-called "management fee."

2. *The investment trust sets up an additional paper step between the investor and the physical operating property.* This increase in the distance between the provider of the funds and the place of ultimate investment, as we have seen, is probably not justified by the better selection of individual securities. On the other hand, it may facilitate a diversification which the ordinary investor cannot achieve by himself.

3. *The regulation of the investment trust is subject to certain limitations.* There can be no complete substitute for human judgment. A law can place restrictions upon the capital structure and can make certain positive requirements. It is doubtful, however, if a law can prevent investment trusts from again yielding to the siren call of stock speculation. It would not be consistent with free enterprise to place the investment policy of the investment trusts under the close control to which we subject life insurance. Because of the long-term commitment and the fiduciary and peculiarly personal and protective nature of insurance, we must regulate the investment of insurance reserves. The investment trust, on the other hand, attempts to accomplish a business, rather than an inherently protective, purpose. A holder of investment-company securities can

* See House Document No. 70, 76th Congress, 1st Session, being Part II, Ch. VI, of the *Report* of the Securities and Exchange Commission on Investment trusts and investment companies, pp. 463-93, especially p. 470.

† Unlike the management companies, the fixed and semifixed trusts tended to invest all their funds in common stocks. As a result, their performance was worse in years of declining stock prices and better in years of rising stock prices than that of the management companies. *Ibid.*, pp. 492-93.

transfer his funds, if necessary even at a loss, to some other company. The holder of an insurance policy, in case of failure of his company, might find that he had become uninsurable and unable to "transfer" to another insurer.

When an investment trust, as a large institutional investor, buys or sells a certain stock, its action may have important effects upon suggestible investors. The market watches the activities of investment trusts carefully. And the fact that a trust buys a large amount of stocks or bonds in some corporation may lead that company into the habit of looking to it for further funds. If a trust lends large quantities to a certain company or buys much of its stock, it may find itself in the position of a too-interested creditor or, like a holding company, concerned with problems of control rather than of investment.

The investment trusts often choose the same securities. Frequently the stock of an important company will be found among the portfolios of a majority of the investment trusts. Strictly as an investor, the investment trusts may have an important effect upon industry. The Securities and Exchange Commission summarizes * some of their activities as follows:

> The enterprises subject to the control and influence of investment companies include banks, insurance and mortgage-financing companies, aviation and steamship companies, oil-producing and refining companies, chemical companies, motion-picture producing and exhibiting companies, steel and rubber companies, food and food-products companies, manufacturing companies of all types, department stores and other merchandising companies engaged in sales of their wares by mail order and the channels of interstate commerce.
>
> A most significant function of investment companies in relation to the immediate needs of the national economy is their potential usefulness in the supply of new capital to industry, particularly to small and promotional ventures. In this connection, the Investment Company Act contains provisions [Sec. 12 (e)] authorizing investment companies to organize and contribute funds to companies to be engaged in the business of "underwriting, furnishing capital to industry, financing promotional enterprises, purchasing securities of issuers for which no ready market is in existence, and reorganizing companies or similar activities." The investment companies have not made use of this provision, although several of the companies and the Commission have expressed great interest in the promising possibilities of such a development.

* *Tenth Annual Report* for fiscal year ended June 30, 1944, pp. 158-59.

Summary. Among the important institutional investors are the commercial bank, the life insurance company, and the investment trust. A commercial bank is characterized by its ability, through the fractional reserve system, to permit or to cause an expansion of total purchasing power. A bank also owes a very large amount of liabilities in relation to the capital funds, with most of the liabilities payable on demand. On account of these peculiarities, the investment of the funds of a commercial bank is of special social and economic significance. There are also many technical problems of investment management.

During the past few years commercial banks have reduced their relative amount of commitments in corporation bonds and in loans and discounts and have become largely owners of United States government obligations. Among the reasons for this shift from advances to business is the declining need, over a period of years, of private business for bank funds, a situation particularly evidenced by the large amount of internal financing, by the high degree of liquidity of the assets of many corporations, and, during the war, by the reduction of special services to customers which ordinarily require the use of liquid resources. On the other hand the commercial banks have been encouraged and at times almost compelled to purchase United States bonds. Moreover, the banks learned that they could make greater profits through the emphasis on low-yield government bonds than from higher-yield corporation bonds and loans and discounts. Reduced costs of investment management, the elimination of losses due to bad risks, the fall in the interest rates on time deposits and the prohibition of interest on demand deposits, and the opportunity of greatly expanding the amount of the total deposits relative to the capital funds—all these contributed to this apparently paradoxical result. There is some tendency at the present time for the commercial banks to expand their loans and discounts and purchases of corporation bonds. For instance, private corporations often will have to raise funds from external sources. The banks are sure, however, for many years to continue to hold large quantities of United States bonds. The fact that the United States is likely to launch upon public works programs in the case of future business recessions points to the desirability of limiting or reducing commercial bank holdings of United States bonds at the present time in order to leave the way open for more such purchases in the case of need.

The investments of life insurance companies must meet the tests of safety of principal, adequacy and steadiness of return, and ready convertibility and marketability. The fact that funds held by these companies may accumulate for many years makes safety of principal of primary importance. The yield must be adequate, since the company has generally promised a certain rate of interest on the reserve funds. Ready convertibility and marketability may also be of extreme importance, particularly if in times of stress the policyholders in large numbers should turn to their insurance company for policy loans.

These requirements, as well as the changing nature of industry and government, have necessitated over the years many shifts in investment emphasis. Farm and city mortgages, railroad bonds, public utility bonds, industrial bonds, policy loans, and government bonds have in varying degrees furnished enormous outlets for the funds of insurance companies. Recently the companies have purchased great quantities of United States government securities.

In so far as the laws permit, the life insurance companies have recently shown great interest in purchasing direct-income-producing property, such as hotels and places of business. Insurance executives are not interested in the suggestion that they buy common stocks. They argue that since the essential functions of a life insurance company are fiduciary in their nature, such company should not have a large share in the normal management of business and industry. Moreover, life insurance companies have not shown much interest in the purchasing power of the dollar.

The investment trust had its origin in the desire of Europeans in the middle and late nineteenth century to transfer their funds to lands across the sea, especially to the United States, where the marginal productivity of capital—and consequently the rate of interest—was higher than in some of the older countries. The typical person, even the possessor of fairly large sums of money, was unable to make the investigation necessary for a sound investment several thousand miles away. Neither could he diversify properly. The investment trust was developed as a way to cooperative analysis, investment, protection, and diversification.

There are three broad classes of investment trust: (1) the management type, which is generally a corporation, perhaps with several types of securities outstanding, whose managers generally have the full say as to investment policy; (2) the unit type, which is a form of the common-law trust having only certificates of trust

outstanding, the trustee being much limited as to the type of securities to be bought and as to when they can or must be sold; (3) the face-amount-certificate company, which is generally a corporation with debt certificates outstanding, carrying cash surrender values, but whose holders do not possess the right to claim the specific assets.

Another classification is into open-end and closed-end companies, the holders in the open-end trust having the right to redeem their securities and in the fixed trust even to withdraw the specific assets behind their securities, while in the closed-end trust they are not able to do so.

The unfortunate experience of investment trusts was due to improper emphasis upon speculation rather than upon investment and to bad accounting and financial practices. The Investment Trust Act of 1940 was designed to impose upon investment trusts and their managers or trustees certain standards of financial conduct and responsibility.

PROBLEMS

1. Banks and other institutional investors hold large quantities of United States securities. These securities vary in term from short-time bills and longer-term treasury certificates to bonds. In the event of a substantial or continued rise in the market interest rates, how can these investors put themselves in a position to take advantage in the future of such higher returns?

2. In the fall of 1947 there was considerable tendency for the commercial banks to reduce their holdings of United States bonds and to increase their loans and discounts and their purchases of bonds of private corporations.

   a. Consult a current issue of the *Federal Reserve Bulletin* and see whether this trend is still continuing.

   b. Of what significance is such a trend to the banks and to business and finance generally?

   c. Of what significance is such trend to government and future government policy?

3. The following summary statements can be made in regard to earnings of the commercial banks insured under the Federal Deposit Insurance Corporation:

The net earnings reached the highest level on record in 1946.

In 1946, about 65 percent of all these banks reported a net profit after taxes of more than 10 percent of their total capital accounts.

In 1943, 37 percent of the banks reported this percent of income or better, compared with only 23 percent of these banks in 1938.

The rate of cash dividends declared by the banks has remained practically unchanged.

a. How, in the face of the low and falling interest rates and the increased purchases of United States Bonds during the period involved, do you account for the increased net earnings of banks?

b. Why did the banks not increase their rates of dividends?

4. Life insurance companies in the United States cannot buy common stocks.

a. What is the reason for this rule?

b. What are the effects of this prohibition on the life insurance companies? On other phases of business and finance?

c. Do you think the insurance companies would welcome a change in the law to permit them to purchase common stocks?

d. Fire and other casualty insurance companies may buy common stock. Why this differentiation?

5. A study by an investment firm (Scudder, Stevens, and Clark) as reported in *The Commercial and Financial Chronicle,* Sept. 25, 1947, contrasted the policies of some of our institutional investors. Colleges and universities have in the last few years greatly increased the funds held in common stocks and preferred stocks and have reduced sharply their relative holdings of both bonds and mortgages. In 1946 common stocks constituted about 35 percent of the entire investment portfolio of these institutions. More than one half of their funds were invested in the securities of American corporations.

According to this study, the average rate of return on the funds and investments of colleges and universities was about 4 percent in 1946, compared with 5 percent in 1931.

a. How, in general, does the investment policy of American colleges and universities compare with that of life insurance companies?

b. Can you see any important or justifiable reason for the difference in the policies?

c. Compare the yield on the investment of colleges and universities with that of life insurance companies?

6. If people live longer than had been calculated in the mortality tables, will an insurance company tend to gain or lose on its life insurance business? What would you say as to its annuity policies?

7. *The Commercial and Financial Chronicle* compilations of new securities issues in the first half of 1947 shows that securities placed privately—that is, securities not publicly offered but sold directly by negotiations to a relatively few large purchasers, ordinarily insurance companies and banks—aggregated $648,727,100. This, *The Chronicle* says,

> is the third largest in total amount and the greatest in the number of issues involved in placements of this nature for any six month period since we started compiling these figures in 1937.

Securities privately placed accounted for approximately 30 percent of all corporate financing in 1947. This compares with 19 percent in 1937, 32 percent in 1938, 25 percent in 1943 and 20 percent in 1945.

a. What are the reasons for the great emphasis at the present time on private placements?

b. What are the possible effects and implications of this trend?

8. In the stock market crash of 1929 the prices of certificates issued by fixed trusts fell much less than did the prices of stocks of management trusts. In fact, the shares of management trusts fell more rapidly than the stock market as a whole. Explain.

9. The following statements have been gathered from miscellaneous sources:

> It is much easier for a dishonest management to loot an investment company than an industrial or public utility corporation.
>
> The investments of an investment company should be regulated just as closely and as rigidly as the investments of an insurance company.
>
> The various acts administered by the Securities and Exchange Commission, the chief of which are the Securities Act of 1933, the Securities Exchange Act of 1934, the Public Utility Holding Act of 1935, the Trust Indenture Act of 1939, and the Investment Company Act of 1940, and Chapter X of the Chandler Act of 1938 [for which the Commission is only advisory] are not a regimentation of owners and dealers or traders in securities but rather a furnishing of safeguards which they are unable to provide for themselves.

Do you agree with these three statements?

Chapter 27

The Corporation and Economic Theory

Introduction. The corporation issues securities. The general public, including the institutional investor, buys them. The interests of these selling and buying groups sometimes clash, sometimes mesh. Under any circumstance the corporation and its financing have had profound impacts upon the structure and functioning of our economic system and upon our social attitudes, and, accordingly, these impacts constitute the subject of the remainder of this volume.

The development of the corporation has complicated our economic and social structure: it has had profound influence upon our economic thinking; it has accentuated the problem of control; and it has brought to the fore the fiction of the legal entity. The first we will discuss in this chapter, the second in Chapters 28 and 29, and the third in Chapter 30.

Economic theory. According to economic theory, when varying applications of capital and labor are being made in a productive unit, a point will be reached at which additional applications will yield diminishing marginal increments of physical product. This law of diminishing returns—or diminishing productivity, as it is often called—is a physical or engineering concept. The businessman is concerned not so much with these physical proportions as with the amount of profit. He wants to produce at the point, not necessarily where diminishing returns set in, but where his profits will be the largest. In economic theory, this is the "point of most profitable use."

In locating or determining the point of most profitable use, the businessman will compare the price which he can get for an extra unit of his product with the cost of the necessary additional amounts of labor and capital. The place where his additional receipts are equal to the additional costs will constitute the theoretical point beyond which he will not carry his scale of operations. The point of

most profitable use is an economic or a price concept. Its exact location will vary with differences in costs and in the price of the output.

Under a system of competition and price flexibility, if an industry has an excess of facilities in relation to the effective demand at a price giving a profit, the price of its product will fall. Such price decline may bring about a fall in the return on the investment. New capital may then hesitate to enter that field. Old and obsolete equipment may not be fully replaced. Some of the plants may even be converted into the making of other products. All these forces will tend to reduce the available supply of the article. Such curtailment will permit or force a recovery in its price. The rate of profit in this industry or company will be adjusted upward so as to approach the rates elsewhere with a similar risk.

If, on the other hand, an industry or a company is undersupplied with facilities, the return on additional increments of capital and labor will tend to be high. Old and obsolete equipment will be fully and quickly replaced, and new additional funds will be attracted. This will mean an increased supply of the product and a decrease in its price. These adjustments will tend to lower the rate of return compared with that of similar companies. Thus, in a competitive and reasonably flexible economy, the price of an article and the return on the investment will tend to be adjusted in accordance with the conditions of demand and supply.

The corporation has helped to modify these principles of competition and adjustment. It has tended to prevent price variations in response to changing conditions. It has also tended to prevent changes in the price from being reflected in the appropriate rectification of the demand for capital and labor. Specifically we may mention five characteristics of the corporate enterprise which make for inflexibility in our economic system: (1) the influence of promoter's profits; (2) the resort to the reorganization process; (3) the facilitation of the condition of monopoly and limited competition; (4) the rise of the professional manager; (5) the effect upon the processes of investment.

1. *The influence of promoter's profits.* The promoter conceives the idea of a new company or combination, investigates its prospects and those of the industry concerned, and takes the necessary organizational and financial steps to bring his brain child into existence. Though we often read stories about the "professional promoter," perhaps most promotions are made by the casual promoter,

who may be a banker, or an inventor with a flair for business, or an officer of a company wishing to enter a combination, or a prominent citizen in the community, such as a lawyer, doctor, or newspaperman.

Theoretically, the promoter performs two basic functions: balancing and marketing. As a balancing or equilibrating force he helps to keep industry in a state of motion. By constantly seeking opportunities for profit he tends to keep the marginal productivity of capital and labor level and uniform among companies in an industry and among industries. If the rate of earnings in one industry is higher than in others, the promoter may be interested in entering that field. He may wish to combine companies already in existence so as to increase their efficiency or to improve their strategic and bargaining position. The promoter facilitates the process whereby existing methods and industries become obsolete, and he opens the way for the introduction of newer methods of production.

The promoter helps to preserve a balance between prices. If prices in an industry become so out of line as to generate an abnormally high rate of return, he stands ready to bring in new competition or to introduce a substitute product. If prices are too low or if profits are below normal, he will not, if he is a man of prudence and foresight, initiate new enterprises in that field.

In his marketing function the promoter serves as a distributor of the factors of production. By watching carefully the conditions throughout the country he will tend to bring about shifts of funds and even of workers from area to area, from industry to industry, from company to company. He is instrumental in drawing savings from those who cannot or will not directly or actively use their funds themselves and putting them into the hands of a management which, as his investigations will presumably have shown, can use them profitably and intelligently. He may serve as a middleman between the owners of resources and processes and the possessors of managerial skill and business enterprise.

If the promoter brings into existence a corporation or even an industry which can produce a greater value per dollar of investment than some other company or industry, he renders a real service. But if he organizes a company which cannot begin to operate at a profit within a reasonable time, he has worked against the social welfare. In the latter event, the promoter has not carefully and accurately compared the marginal productivity of a dollar of investment in his project with the rate in other companies or indus-

tries. He may have viewed his scheme through colored and badly adjusted glasses.

As compensation for his services a promoter is generally given common stock of the company.* Thus, if the company prospers, the promoter will prosper; if the company does not come up to expectations, the promoter's stock has little or no value. Theoretically, therefore, a promoter is paid according to the financial worth of his contribution.

As a matter of practice, things do not always turn out in this theoretical way. Professional promoters often dispose of their stock immediately in order to enter fresh fields. They frequently organize corporations, therefore, where the instant financial gain promises to be the largest, not where the profits from actual operations may be the greatest. They may be interested more in the quantity of stock they can obtain and in the price it will bring in a quick sale, perhaps even through manipulation of the market, than they are in the long-pull prospects of the company. The fact that such immediate financial or promoter's profits are substantial does not necessarily mean that the company will be successful. On the other hand, the fact that promoter's profits are small does not mean that the new enterprise is undesirable or will fail to yield a satisfactory return in the long run.

Numerous instances may be cited of promoters obstructing the free operation of economic forces. Sometimes they may be instrumental in having people put money into an enterprise in utter ignorance of its merits and weaknesses or even of its nature. We referred some pages earlier (Chapter 22) to the English prospectus issued in 1720 which advertised an "undertaking of great advantage but nobody to know what it is." But a report † by the United States Department of Commerce contained this caustic comment:

> More than 200 years later, supposedly sophisticated Americans are wasting billions of dollars in the purchase of shares in enterprises with no

* English promoters are often given special founders' shares or deferred shares, which are shares issued with limited or delayed privileges. For instance, the payment of dividends may, by contract, be deferred for several years. American promoters are sometimes also paid by means of options to buy stock at a specified price. If the option price is greater than the market price of the stock, the option is only a dead letter, but if the market price rises to a point above the option price, such privilege will have a value. The rise in the market price may be a reflection of the wisdom and ability of the promoter.

† Report prepared for Committee on Banking and Currency, United States Senate, 73rd Congress, 1st Session, on S. 875, p. 317 of *Hearings*.

more information concerning the important facts than those earlier British "investors" had concerning the South Sea project.

Much of the troubles of international finance in the 1920's had their origins in the uneconomic projects, particularly in Latin America, which were started by promoters who were more interested in having available a supply of securities for avid "investors" than they were in opening up worth-while enterprises for our neighbors. Many of our early railway projects were not economically justified. Mining has always been a luscious field for the professional promoter. Numerous early industrial organizations and combinations were conceived by promoters eager for gain.*

Many public utility holding companies were started to a large extent because of the tempting profits to the promoter and the investment banker. Carrying out the provisions of the Public Utility Holding Company Act of 1935, the Securities and Exchange Commission has already labored for ten years taking apart combinations which should never have been put together.

Other motives besides promoter's profits have, of course, entered into the formation of corporations and combinations.† If immediate prospects of quick gains have induced the organization of companies which should not have come into existence, the promoter has helped unduly to expand industry. If, on the other hand, the lack of expectation of such special returns has retarded the initiation of business enterprises which would have satisfied a social need, to this extent, also, the concept of promoter's profits has hindered the working out of the principles of competition and price flexibility.

2. *The resort to the reorganization process.* According to the theory outlined at the beginning of the chapter, if an industry or company is not profitable, new capital will be discouraged from entering that field. Depreciated and obsolete plant and equipment will

* In Chapter XII of *The Trust Problem in the United States,* Macmillan Co., 1921, Professor Eliot Jones gives many illustrations of the influence of promoter's profits on the earlier combination movement in the industrial field. "The conclusion would appear to be abundantly justified that the prospect of securing promotion profits has contributed markedly toward the formation of numerous trusts. It played a lesser part, however, than the hope of achieving monopoly prices. A number of trusts, as we have seen, were organized without the anticipation at least of monopoly gains" (p. 299).

The reader is referred to Henrietta Larson's absorbing book, *Jay Cooke, Private Banker,* Harvard University Press, 1936, for an account of the ventures of that promoter. Jay Cooke always preferred to sell the stock he received rather than to take part in the management and control.

† See Chapters 16 and 17.

not be replaced. If a company proves to be permanently unsuccessful, it may be thrown into bankruptcy and liquidated. The breaking up of such businesses will, in turn, facilitate the conversion of the assets into other uses.

Things have not always worked out ideally in this respect either. The plant may not be easily "broken up." The creditors of an unprofitable business may not want the assets and would not know what to do with them if they did get them. The nature of the service may be such that its discontinuance will cause hardship to the public. Labor may intercede in defense of jobs. Certain security holders may protest at the liquidation. Both the diehards and the hopefuls may plead that the company could do better under a "new management."

So the ailing corporation is put through a reorganization. Certain of the bondholders, as we have already seen, are forced to accept stock or contingent interest bonds, often called income bonds or adjustment bonds. Other security holders are wiped out altogether. Until recently, the committees who drew up a reorganization plan placed little emphasis on the reduction of the total par value of outstanding securities or on increasing the average return on the total capitalization. The company—or, often more accurately, the new one which takes its place—continued in business after the reorganization, safer from a financial outlook but really in no better position from the social and economic point of view. During the process of running the corporation through the financial wringer, the reorganization managers may even have provided for the raising of new capital.

After the reorganization, the company may be above the financial margin—that is, be in little danger of bankruptcy—but, again, it may continue below the economic margin. The formulation of a "feasible" capital structure does not of itself necessarily convert an economically unjustified company into one that is economically justified. Probably a company that is barely able to keep afloat should leave the field. As things tend to work out even under our present procedure, however, a business will be liquidated only when it is in an utterly hopeless condition and only if the security holders, after prolonged negotiations, cannot come together on a plan of reorganization. If the business is too closely connected with the public's convenience, the company will probably not be liquidated at all. If the company is able to limp along, its life may be preserved through a reorganized successor with an amended charter, but such

reorganization may curb and obstruct the working out of the processes of economic readjustment. Sometimes, indeed, the reorganization may be an "incubator for future reorganizations." * Hopelessly unprofitable companies should be put out of their misery in the absence of special circumstances requiring their operation. Perhaps a sort of financial euthanasia could be perfected. This scraping off of the barnacles would help move capital and labor into more economically desirable outlets.

3. *The facilitation of the condition of monopoly and limited competition.* In so far as the corporation has contributed to the growth of monopolistic and semimonopolistic groups, it has helped to develop a stickiness and inflexibility in our economic processes. A company having a monopoly or a limited monopoly will adopt that scale of operations at which its net profit promises to be the greatest. The average cost per unit of producing at this point will be higher than that at the optimum (the point of lowest average unit cost). Unlike perfect competition, a state of monopoly or limited competition represents a condition of only temporary or arbitrary equilibrium. Each of several large competitors could probably expand its output and thus reduce its average cost per unit, but it will refrain from doing so in the fear that the others will retaliate. This would mean cutthroat competition. There is, so to speak, an "armed truce" among the competitors, each eying the others while adhering to the tacitly understood output and price. Even the monopolist will be watchful of potential competition and the popularization of substitutes.

Under such circumstances, there can be little automatic adjustment in the prices of the product or service. In case of business slumps these companies will probably reduce their output in order to keep prices up rather than to let prices fall in the hope of maintaining the output.

A frequently cited table is that prepared by Gardiner C. Means.† The first five industries are oligopolistic, while the last five are characterized more or less by competition.

* The Securities and Exchange Commission has, under Chapter X, been rather forthright in "cracking down" on reorganization plans that will not work, that are mere colorations of reorganizations and that may leave the company just as much in financial difficulties after the proceedings as it was before. See H. L. Jome, "The New Schoolmaster in Finance," *Michigan Law Review,* Vol. 40 (March 1942), pp. 625-53, at 643-45.

† Data from "Industrial Prices and Their Relative Inflexibility," Senate Document No. 13, 74th Congress, 1st Session, p. 8.

PERCENTAGE DROP OF PRICE AND PRODUCTION OF TEN COMMODITIES, AVERAGE MONTH 1929-APRIL 1933

Commodity	Price	Production
Agricultural implements	6	80
Motor vehicles.	16	80
Cement.	18	65
Iron and steel	20	83
Auto tires	33	70
Textile products.	45	30
Food products.	49	14
Leather.	50	20
Petroleum . .	56	20
Agricultural commodities.	63	6

If a company or group of companies purchases a large proportion of the available raw materials or labor, the suppliers of these will have only a limited market outlet and will thus be more or less subject to the will of the company doing the buying. In such event the workers and the suppliers of the raw materials have a special reason for organizing. It is no accident that one of the strongest labor organizations in the United States first developed among the coal miners, who are strategically dependent upon a single type of employment. One of the last groups to organize was the farmers who, as we have already seen, have been brought together under the Agricultural Adjustment Administration, the main function of which has been to maintain prices by the curtailment or regulation of output under government auspices.

The friction and lack of automatic adjustment which develop are often considered as caused by "the capitalistic" corporation, as we commonly call it, but the labor organization and now the farmer organization contribute aggressively, as well as defensively, to the inflexibility. Neither the union nor the farmers' association, it is true, is legally or technically a corporation, but they operate much as one. They have learned to apply monopolistic pressures and they also attempt to prevent downward adjustments in wage rates and prices of farm products to correspond to changing market situations. This is particularly true when unions, for example, attempt to keep money wages high in the face of increased unemployment.

They would rather keep wage rates up and let the number of jobs fall than to permit wage rates to drop even though such fall might stimulate employment. They would, of course, strongly prefer full employment and high wage rates, if such a condition is possible.* Similarly, the farm lobbyist would like nothing better than unlimited production and high prices.

Healthy commerce under conditions of free enterprise implies an ability on the part of traders to meet changing market conditions. The device relied on as a regulator has been freely changing price. By facilitating the concentration movement, corporations have encouraged inflexibility in the prices of their products. The number and quantity of goods whose prices are "insensitive"—that is, rather unresponsive to changing conditions of demand and supply—are on the increase. Purchasers of raw materials and of labor formerly transferred to many of these suppliers the burden of making adjustments. Labor unions, however, will fight against a lowering of wage rates in case of business reversals. Farm lobbies will continue to exercise pressure for a high floor under the prices of agricultural products. Several other raw materials are produced under monopolistic or partially monopolistic conditions, and the companies controlling them will permit very little flexibility in these prices. Raw-material industries and labor may refuse to furnish the flexible element in our economy.

What, then, will be the flexible element? The answer could be found in adjustable rates for capital borrowed by corporations. Some have even suggested that the distinction between stocks and bonds be eliminated and that companies have only one kind of security outstanding—a security whose rate of return could vary with the need for cutting costs. In view of the great amount of refinancing and the large number of debt adjustments, this seems to be a condition to some extent already existing.

If the corporation and the labor union and the supplier of raw materials will not furnish the necessary flexibility in production and prices and if the private capitalist cannot stand the burden of this adjustment, the function of furnishing capital may be thrown into the lap of Uncle Sam. Government would then supply the flexible element in our economic system. The effects of this change

* The impression must be avoided that the mere breaking up of such oligopolies and monopolies would establish perfect flexibility. Their mere removal would result in chaos. A more positive public policy and control would be needed. See Oscar Lange, *Price Flexibility and Employment,* Principia Press, Bloomington, Ind., 1945, p. 85.

in our policy upon the profit system and free private enterprise can be left to the imagination.

4. *The rise of the professional manager.* Until quite recently the typical entrepreneurs envisaged by our economic theorists were sole proprietors or partners or probably stockholders in a closely held or in a one-man corporation. These men supplied most of the capital themselves. They were interested in making the greatest possible net profit. Their whole life and existence were wrapped up in their business enterprise. Their own personal welfare went up and down with that of the business.

The modern widely held corporation, however, has brought with it what is generally known as the "professional manager." The chief officers and even the members of the board may have little financial commitment or stake in their company.* The professional manager may not be as interested in or dependent upon the quantity of the net profit as he is in the continuation of a healthy company as a source of his future livelihood. Often "the amount of productive wealth that they [the managers] control is likely to appear of more importance than the profit it yields." † The furnisher of the capital, whether bondholder or stockholder, is little concerned with the management of the company. He is interested in a substantial return on his investment, of course, but not necessarily in the maximum net return. He is probably unable to judge as to the location of the point of most profitable use or of greatest profit. Even if he could, such knowledge would do little good, for the professional managers generally decide upon the scale of operations and the amount of the property to be devoted to the business.‡ And the professional managers are not often large stockholders.

* A report for the Temporary National Economic Committee, Monograph No. 29, showed that 2500 out of 3000 officers and directors and officer-directors in 200 of our largest nonfinancial corporations owned stock in their companies. The other 500 had no investment commitment whatever in the companies under their control and management. Furthermore, the directors owned only 3 percent of the voting stock. The officers, directors, and officer-directors all together, owned only 5.5 percent of the total value of the common and preferred stock of their companies.

† Cecil Kenneth Brown, *Introduction to Economics,* American Book Co., 1941, p. 376.

‡ The changed position of the managers has brought into focus the problem of the method of their compensation. There are three basic ways of paying executives: (1) the straight salary, (2) the salary plus some kind of additional bonus, (3) the commission. The trend seems to be toward the second. John C. Baker, "How Should Executives Be Paid," *Harvard Business Review,* Vol. XVII (Autumn 1939), pp. 94-106.

Though in theory the board of directors selects the major executives and outlines the general operational and financial policies of the company, actually in the widely held corporation all these functions are frequently performed by the officers or executives who occupy an influential position on the board. The board in full session is frequently passive and at best it often approves rather than initiates. The members of the board who are not officers may occupy a mere advisory, rather than an active directing, position. These conditions draw the control of the typical large corporation farther away from the stockholders. In public utilities and railroads, and to a lesser extent in industry, bankers have had some representation on the board and have also frequently influenced the issue of securities and, in case of financial difficulties, the process of reorganization.* Such banker influence, except possibly that exerted by insurance companies, has been dwindling since 1929. The very development of the professional manager has helped to curtail such outside control.

While the suppliers of risk capital have been losing or relinquishing their control, besides the professional managers other groups in our society have been "moving in." Through the operation of such laws as the National Labor Relations Act and through aggressive union leadership, labor is getting an increasing share in the control of business. Emphasis upon the maintaining of consumer or mass purchasing power and the regularization of employment will have widespread effects upon corporate managerial policies. Government has set up an increasing number of rules of conduct. In some fields it sets up a pattern of action—the Tennessee Valley Authority. It often influences private business by the lending of money—the Reconstruction Finance Corporation. Government constantly acts through numerous regulating agencies in the

* Robert A. Gordon in *Business Leadership in the Large Corporation,* The Brookings Institution, 1945, Ch. VI, gives important facts in regard to the boards of directors of large companies. The typical board has about 13 members. In 1935 the executives constituted at least 25 percent of the board in 67 out of 84 industrial companies and in 22 out of 35 utility companies, but this was true for only 17 out of 36 railroads. In 30 of the 84 industrial companies the executives comprised 50 percent or more of the directors, while in only a scattering of the public utilities and in none of the railroads did the officers comprise half of the board. Where executives predominate on the board it may be concluded that it tends to lose its position as an independent body. Even in such cases there may be "influential directors," who though not officers, have the inside track to the chief officials of the company.

fields of rate making, wage fixing, and approving the issuance of securities. The federal income tax has had a vital effect upon corporate accounting and financial practices.

Nonprofit considerations seem to be demanding an increasing portion of the attention of the corporation executives. As Edwin G. Nourse recently stated the problem: "How, then, is the individual manager going to discharge his primary trusteeship—maximum profits for owners of the individual firm—by promoting the larger objective—maximum production from full and efficient use of the nation's resources?" *

The free transferability of securities, desirable as it is, has helped to dislodge the stockholder as a direct and consistent influence in corporate policy and has tended to make the bondholder powerless to protect his legal rights. Security holders in the widely held corporation have no loyalty to the corporation or to one another. A person does not become attached to a piece of paper. Though it is true that the management has shown little interest in whether a stockholder comes or goes, some progress has been made in the direction of better relations between the corporation and its stockholders.†

This lack of mutuality of interest has more than mere sentimental implications. It is a matter of practical importance. A bondholder may not even know the identity of his fellow holders. If the company prospers, this may not matter. But if things do not go well, if, for instance, there is a default in a sinking-fund installment or if the proceeds of a bond issue are not invested according to the terms of the bond and mortgage contract, the bondholders have little chance of knowing that anything is wrong and of contacting

* *Price Making in a Democracy,* The Brookings Institution, 1944, pp. 322-23. See especially Chapter XI on "Basic Criteria of Price Policy."

The problem of business leadership in the large corporation is receiving an increasing amount of attention from writers in this field. An exhaustive treatment of this topic was made by Robert A. Gordon in *Business Leadership in the Large Corporation,* The Brookings Institution, 1945. See especially Chapter XIV on "The Professionalization of Business Leadership." See also article by Gerard Swope on "Some Aspects of Corporate Management," *Harvard Business Review,* Vol. XXIII (Spring 1945), pp. 314-22.

† A survey of 100 prominent corporations, prepared for the National Association of Advertisers and the *Journal of Capital* under the title "Survey of Stockholder Relations Activities," as summarized in *Business Week,* June 14, 1947, p. 86, shows that one half of them take the trouble to welcome new stockholders and twelve send letters of regret to stockholders who sell their shares.

one another. To take care of this type of situation, special government regulations were necessary.*

Stockholders, also, are helpless in bringing collective action for relief. They are not creditors and cannot as a legal right complain when dividends are not declared. Stockholders know little about the company and its business. In some cases this is because the company furnishes inadequate information. In other instances it is because the data supplied are complex and technical. Frequently the typical stockholder does not read the material furnished to him anyway. And, most serious of all, by the time the stockholder learns that something is wrong, the damage has been done and may be irreparable.

5. *The effect upon the processes of investment.* The corporation has tended to cause an alteration in the basic processes of investment. The "investor" who buys a security direct from the issuing corporation does not really do the investing. He merely entrusts his funds to the company, which then buys the machines and equipment or the land and buildings, or sets up its working capital. The company becomes the real investor.

If instead of buying a security from the issuing corporation, the owner of funds obtains it on the market, either over the counter or through a stock-exchange broker, the basic investment process is even more obscured. Such a security purchaser does not furnish funds to any specific company: he really supplies them to the general capital market.† When a person buys a share of United States Steel common stock on the market, he pays no money to that corporation. That company received its proceeds at the time the stock was originally issued.‡ Transactions on the market do not directly affect the capital of the company, but they may, through the price proc-

* See Chapter 21 for an account of the circumstances leading to the passage of the Trust Indenture Act of 1939.

† In *The Stock Market, Credit and Capital Formation,* Macmillan Co., 1940, Fritz Machlup gives the following as the first of "thirty-seven lessons": "An investment of money capital which liquidates a previous investment of another person constitutes merely a transfer of funds." P. 288.

‡ Students will remember that the common stock of the United States Steel Corporation was highly watered at first—that is, the corporation issued a greater par amount of stock than it received in actual balance-sheet assets. In contrast, in 1929, stockholders were given the right to subscribe at $140 for one new $100 par share of common stock for each seven shares held. The company, of course, received this $140. The present purchaser at, say $70, pays to the market, not to the company, a price which happens to be somewhere between the early figure of virtually nothing and this later subscription price.

ess, influence the company's ability to obtain new funds in the future.

The investor in a bond places his money for a definite term of years; the buyer of a stock theoretically places his money indefinitely. As a matter of fact, if the bonds or stocks are readily marketable, the holder, in effect regards either form of security as almost a call loan. He is free to sell his "investment" at any time provided he is willing to sustain a loss. He may, of course, also sell at a gain. But, the point is, he can and does sell almost at will.

In practical effect there is little difference, if any, between a stock and a bond. As we have seen, both may be easily passed from hand to hand especially if the market is active and if they are issued by a widely held corporation. Neither form of security represents a fixed or permanent placement of the investor's funds. The company on its side, may mix the proceeds of a sale of stock and of a sale of bonds indiscriminately in the same asset.

Legally, of course, bonds do represent a prior, and sometimes also a secured, claim to assets as well as to earnings. In practice, however, if a corporation goes into bankruptcy and is so badly off as to require dissolution, there is probably so little left that neither the bonds nor the stocks have any worth-while claim. As we have already seen, a bondholder would not know what to do with a portion of the railroad roadbed or a part of a steel mill, if they were given to him. The bondholders are no more eager to receive their share than are the stockholders. If the company goes through the process of reorganization, courts and administrative commissions attempt to enforce the absolute priority rule, but even so the holders of many bonds may be rudely awakened to find themselves stockholders. The holders of a corporate mortgage, particularly in the case of the large companies, do not generally enforce their claim on the specific property.

Involuntary saving. The widespread use of the corporation has also tended to give rise to a system of involuntary saving.* The directors who, even in the aggregate, own only a small proportion of the stock of the large widely held corporation, officially as a board fix the dividend policies generally from quarter to quarter. Some companies

* The term "involuntary saving" has several usages in economic literature. In banking and money theory, for instance, it often refers to the reduced spending by consumers in the event of a rise in the prices of commodities. This reduced spending becomes a sort of saving, but it is not done by the will of the "saver." Or a rise in prices may force an individual to work harder or longer to obtain the things he wants.

pay out only a part of their earnings, thus accumulating a surplus; others pay out approximately the amounts they earn; still others distribute much more than their annual income.* Since the stockholders do not directly vote on the question of dividend policy, this accumulation of surplus may be called involuntary saving.

The productivity to the corporation of the extra capital retained by it may be greater than the rate at which the stockholder himself could "invest" the money if he had received the withheld amounts in cash. In that case there is a social gain. On the other hand, the corporation may already be so well supplied with funds that the extra capital withheld will bring in little additional income and may merely make the management more "comfortable." The company may receive a lower rate than the stockholder himself could have earned directly on his own account if he could have invested the withheld earnings himself. In this event, the accumulation of a large corporate surplus may constitute a social loss.

In so far as a corporation builds up relatively unprofitable or unnecessary surplus it tends to obstruct the free flow and mobility of capital and resources. It also tends to disturb the automatic relationship between saving and spending. If a company earns less than a normal return on its investment for a long time, economic theory presupposes that it will engage in a process of disinvestment. Instead of doing this, however, it is likely to attempt to build up a further surplus. Such failure to permit adjustments may be due to the "vanity and the megalomania of the managers, who may not personally suffer from their unprofitable investment of other people's money, because they own so small an amount of the concerns that they manage, and because they receive their incomes from them largely in forms such as salary and bonus." † The organization of the modern large corporation is often such that the typical professional manager is likely to consider his company as a "petty state whose borders, if they cannot be extended, must at least be maintained." ‡

* Many companies which have accumulated a large surplus by withholding earnings in the past may, if their assets are available and liquid, pay out more than their specific annual earnings for a considerable period of time. Mining companies, by making no allowance for depletion, in effect overstate their earnings and, if they distribute most of their calculated income, they really may engage in a process of disinvestment.

† From Cecil Kenneth Brown, *Introduction to Economics*, American Book Co., 1941, pp. 376-77.

‡ From Lloyd G. Reynolds, "Competition in the Rubber-Tire Industry," *American Economic Review*, Vol. XXVIII (September 1938), p. 465.

From 1939 to 1944 American corporations earned a total net income after taxes of $46,900,000,000, out of which they withheld $21,500,000,000 or about 47 percent. As already suggested in Chapter 14, a strong case can be advanced for the proposition that a corporation should pay out practically all its earnings in the form of dividends. Whenever the company needs additional funds it could then dispose of its bonds on the general market or induce its stockholders to buy additional stock or, if the stockholders have no preemptive right, dispose of new stock through the regular channels. There is some argument, also, in favor of permitting the stockholders by ballot to approve or disapprove the rate of dividend. Such measures would tend to make for an equality between the rate of return earned by a corporation and that earned by other enterprises in the same field or in comparable industries.*

The "orthodox" theories of the classical economists assumed that the business enterprise and company were closely identified with the individual owner, that there was a fairly free competitive market, that labor and other factors of production could freely enter and leave any industry, and that money saved would be automatically invested in the most profitable use.† In short, these theories assumed a high degree of flexibility and automatic adjustment in the industrial processes and a high degree of aggressiveness on the part of the proprietor.

* One of the most penetrating and caustic critics of the corporation in business enterprise was Thorstein Veblen, whose fundamental theme was the antithesis between *business* and *industry.* A paradox of our modern economy is the fact that the productive process which exists for the making of goods is directed and motivated by people interested in strategic position and the largest possible monetary gain. In this set-up the private corporation is a device for making money, not for making goods. The private corporation, Veblen said, promotes its interest by a series of financial manipulations and fictions. See *The Theory of Business Enterprise,* Charles Scribner's Sons, 1904, especially Ch. III.

"The point of chief attention for the businessman," said Veblen (p. 24), "has shifted from the old-fashioned surveillance and regulation of a given industrial process, with which his livelihood was once bound up, to an alert redistribution of investments from less to more gainful ventures and to a strategic control of the conjunctures of business through shrewd investments and coalitions with other business men." And again (p. 176):

"The property of those who own less, or who own only material goods, is administered by those who own more, especially of immaterial goods; and the material processes of industry are under the control of men whose interest centres on an increased value of the immaterial assets."

† See Robert Triffin, *Monopolistic Competition and General Equilibrium,* Harvard University Press, 1940, pp. 186-89.

The effects of the corporation upon our economic system and economic theory, which we have just considered, are significant and far-reaching. They tend also to bring into focus the problem of control to which we next turn.

Summary. In this chapter we have considered the effect of the corporation upon our economic processes.

The corporation has tended to obstruct the working out of "orthodox" principles of economics. The promoter constitutes the first obstacle discussed. Theoretically, he performs both an equilibrating and a balancing function by bringing productive facilities from business where they are abundant to places where they are needed. Actually, however, the promoter carries out neither of these functions well and, instead of bringing capital, labor, and enterprise into places where they are needed and guiding them out of places where they are not needed, he tends to start companies and businesses where he can make the greatest promoter's profits. Instead of starting a company or a business where the long-run prospects are the best, he is often influenced by the amount of gain which he can receive from the immediate sale of the stock which he was given for his services as a promoter.

Another obstructing influence is the reorganization process. A company may be forced into financial difficulties for various reasons, one of which is that its efforts are not needed in its particular field of activity. In such event, the company should probably discontinue operations, or at least leave that field, but the reorganization process keeps it in existence.

A third important effect of the popularization and widespread use of the corporation is the facilitation given to the process of combination. Thus, in many instances, the corporation has been a force making for monopoly.

Next, the corporation has been accompanied by the rise of the professional manager, who is quite different from the old-time sole proprietor. The professional manager is sometimes interested in the perpetuation of his company merely as a means of his livelihood or he may, for social reasons, be interested in other objectives than the maximization of profits. The entrepreneur no longer exists as the head of a large enterprise. Industry has become calculative rather than enterprising.

Finally, the corporation has helped to alter the basic processes of investment. The typical investor may often buy already issued securities from others or through brokers and exchanges, thus furnishing

funds to the general market rather than to the corporation. The widespread use of the corporation, with the development of numerous forms of securities having free transferability and bringing little control to the stockholders and hardly any ability on the part of the bondholders even to follow out their claims, has tended to obliterate the essential differences between the equity and the nonequity funds of a corporation.

All these developments have helped to bring into focus the problem of the control and the management of the corporation. To this problem we now turn our attention.

PROBLEMS

1. E. M. Dodd says in *Harvard Law Review,* Vol. 54 (1941), p. 927:

> Control over an industrial corporation by men [who] think of the corporation as a producer of bonds and shares rather than as a producer of steel or cotton goods is not an unmixed evil, but the history of the 1920's is full of illustrations of its danger to investors and to the community at large.

a. Would Professor Dodd agree with the views of Thorstein Veblen?

b. Why does Professor Dodd say this control is not an "unmixed evil"? Are there any advantages?

2. The early Union Pacific Railway was unable to pay its fixed charges and was placed in the hands of receivers. The property was sold at foreclosure under order of a federal court in 1897 and title was transferred in that year to the present Union Pacific Railroad Company. Edward H. Harriman was one of the participants in the syndicate doing the reorganizing, and he obtained control of the management.

a. Referring to the Charter of Articles of Association of Union Pacific Railroad, Appendix B, do you note any reference to these earlier companies?

b. Why were the company and its business not liquidated?

c. How does a reorganization reduce the fixed charges?

d. Was the reorganization of 1897 an equity reorganization or was it carried out according to the provisions of a statutory law of Congress?

e. What is meant by a syndicate? Does the investment banker ever perform any functions other than those involved in a reorganization? (See also Chapters 13 and 15.)

3. Arthur R. Burns in *The Decline of Competition,* McGraw-Hill Book Co., 1936, p. v, says:

The use of the heavy industries, changes in methods of selling, and the widening use of the corporate forms of business organization are bringing, if they have not already brought, the era of competitive capitalism to a close.

What elements of truth are there in Mr. Burns' statement?

4. "Management hires capital, rather than capital hires management." What are the elements of truth and falsity in this statement with special reference to the widely held corporation? Is the statement true of the closely held corporation?

5. Paul M. O'Leary in *Corporate Enterprise in Modern Economic Life,* Harper & Bros., 1933, p. 25, says that

in modern large corporations there exists a complex assortment of property rights or equities, or segments. Some of them are not property rights, but all of them are what may be called segments of interest.

Which types of securities and which groups of people connected with corporations represent property rights? Which represent segments of interest? (Include in this not only the holders of securities of various kinds, but also the management, the workers, the consumers, and the government.)

6. Summary of study of directors and their functions made by John C. Baker (as reported in *Journal of Accountancy,* May 1946, p. 357):

Some boards are made up entirely of officials of the company. They are likely to be dominated by the chief executive. Some are made up of major stockholders, and they are likely to dominate the salaried management. The majorities of some boards consist of outsiders who are neither officials nor large stockholders but are men chosen for their experience and judgment.

In which of these situations will you find the so-called "professional management" dominant?

7. In Von Beckerath, *Modern Industrial Organization,* translated by Robinson Newcomb and Franziska Krebs, McGraw-Hill Book Co., 1933, p. 72, appears this statement:

[The ploughing in of profits] imperils industrial development and runs counter to the structural fundamentals of the liberalistic-capitalistic system and of present day industrialism.

Discuss Von Beckerath's statement.

8. In the literature of cyclical depressions, emphasis before 1900 was upon the inadequacy of consumption and the lack of proper distribution. Then there was a shift toward the overinvestment theory, followed in the late 1920's and the 30's by a resumption of the emphasis upon inadequacy and bad distribution of purchasing power. Has the growth of the corporation, with its system of involuntary saving, had anything to do with the weight placed upon underpurchasing power as a cause of depressions?

9. During the last few years there has been considerable discussion of how business executives are to be paid. (See, for instance, John C. Baker, "How Shall Executives be Paid?" *Harvard Business Review,* Vol. 18, Autumn 1939, pp. 94-106.) The problem is said to be created by the "advent of large corporations and diffused stock ownership."

What have these to do with the situation?

10. Sumner H. Slichter, in *Modern Economic Society,* Henry Holt & Co., Inc., 1931, pp. 81-82, says the voice of owners in the control of industry seems to be diminishing due to (*a*) state intervention, (*b*) trade unionism, (*c*) professional management. Show how each of these forces is operating.

11. The argument has been advanced that corporations should pay out practically all their earnings in dividends and thus rely on the investment markets for a greater proportion of their funds. Build up a case for and against this suggestion.

Chapter 28

The Problem of Control

THE ideals of a democracy are intelligent and responsible control by the majority, with adequate representation of an alert minority. Though the corporation is in legal theory a democratically controlled institution, there are two tendencies of opposing natures, which prevent the working out of these ideals.

The one of these—and the least serious from the social point of view—is the freezing out of the minority. The other—and the more fundamental—is the abdication of the majority.

FREEZING OUT THE MINORITY

Two possibilities. This is likely to occur in two situations: (1) where a holding company controls more than 50 percent but substantially less than 100 percent of the outstanding stock of a subsidiary; (2) where a small group owns the majority interest in a closely held corporation, while a minority of the shares are in the hands of a person or persons whose interests are economically or even emotionally in conflict with those of the large holders. The majority is likely through the straight method of voting to elect all of the board of directors.

Suppose, for instance, that Mr. Bigger, through his family and associates, owns or controls 60 percent of the 1000 outstanding shares of a corporation, while several lesser individuals own the other 400 shares. If there are nine directors to be elected by the usual method of voting, Mr. Bigger can place 600 votes on each of his favorites, while the minority, even if they act as a unit, can place only 400 votes on each of their nine candidates. All of Mr. Bigger's slate will be elected. The minority is completely shut off from participation in the management.

Cumulative voting. The device of cumulative voting has been developed to remedy this situation. It permits the minority to make, so

to speak, a concentrated attack. Under this system, if there are nine directors to be elected, the holder of one share can place one vote on each of nine candidates, or nine votes on one candidate, or he can select any combination he sees fit. In our illustration, the holders of the 400 minority shares have 400×9, or 3600, votes in all. The majority has 5400 votes (600×9). Now assume that the minority decided to distribute their votes equally among four candidates. Each candidate would then get 900. If the majority distributed their votes among six candidates, each would get 900. There would now be a tie vote among ten candidates, or we might say that the majority is sure of five directors and the minority is sure of three directors. The ninth position is in doubt. This doubt would be resolved in favor of the minority, if it had one share more than 400, or in favor of the majority, if it had one share more than 600.

A common formula is in use for situations of this kind. Let m represent the number of shares held by a certain group, t the total number of shares outstanding, d the number of directors to be elected. Let x stand for the number of directors that can be elected by the holders of m shares. Then,

$$x = \frac{(m-1)(d+1)}{t}$$

Substituting our figures above, we get in the case of the 400 shares,

$$x = \frac{(400-1)(9+1)}{1000} = \frac{3990}{1000} = 3+,$$

that is, 3 directors, and for the 600 shares,

$$x = \frac{(600-1)(9+1)}{1000} = \frac{5990}{1000} = 5+,$$

that is, 5 directors.

Only 8 directors would be definitely elected by the balloting. The ninth would probably have to be selected by lot.

If we now assume that the minority group has 401 shares and the majority has 599, the formula works out as follows:

$$x = \frac{(401-1)(9+1)}{1000} = \frac{4000}{1000} = 4$$

$$x = \frac{(599-1)(9+1)}{1000} = \frac{5980}{1000} = 5+, \text{ or } 5.$$

It will be noted that the shift of one share gives the minority 4 directors and the majority only 5. If we change the figures so as to give the majority 601 and the minority 399 shares, the majority would command 6 directors and the minority could select only 3+, that is 3, directors.

This formula can be used to compute the number of shares needed to insure a group a specified number of directors, x, say 4. In this case the number of shares held, or m, would have to equal at least

$$\frac{tx}{d+1} + 1.$$

Substituting, to control 4 directors, m must equal at least

$$\frac{1000 \times 4}{9+1} + 1 \text{ or } 401.$$

Though some states require, and others permit, cumulative voting, the system is not widely used.* In the small closely held corporation whose stock is voted personally, the cumulative method of voting may have a real advantage. The basic problem in the widely held corporation, however, is not the protection of the minority from abuse by the majority, but rather the protection of the majority from irresponsible control by the minority. This brings us to the second, and more important, phase of the subject of control.

* One of the most interesting cases involving cumulative voting is that of *Pierce* v. *Commonwealth* (1883), 104 Pennsylvania 150. The Sharpsville Railroad Company had 7000 shares outstanding. A total of 6433 shares were voted, of which the majority group held 3396 shares, the minority 3037 shares. There were six directorates. Under cumulative voting the minority had 18,222 votes (6 × 3037). The minority massed these 18,222 votes on four candidates. The majority, which was not aware that the minority was voting cumulatively, voted in the usual way, giving 3396 votes to each of their six candidates. The minority candidates received 4557, 4556, 4555 and 4552 votes. (Two votes were not distributed.) Each of the majority candidates received 3396 votes. As a result, the minority elected four of the six directors. The majority complained that the minority had acted unfairly in that they did not give notice of their intention to vote cumulatively. Their argument of "fraud" was turned down by the courts, but it is interesting that at least three states (Minnesota, North Carolina, and Ohio) passed laws requiring a group of stockholders to give advance notice of the intention to cumulate votes. See *Minnesota Law Review,* Vol. 21, pp. 351-70, for this and other controversial cases of cumulative voting. In *E. G. Dulin* v. *Pacific Wood and Coal Co.* (1894), 103 California 357, the *minority* had been caught napping. The minority stockholder in this case was defeated for director because he failed to cumulate his votes. The court said it had no power to relieve him from his own error and neglect.

ABDICATION OF THE MAJORITY

The majority may be divorced from a share in the control in numerous ways, but we will here describe only a few of the circumstances or devices tending to bring this about. Among these are:

1. The holding of a large number of voting shares by widely scattered and disinterested investors.
2. The classification of securities.
3. "Trick" devices.
4. The voting trust.

1. The holding of a large number of voting shares by widely scattered and disinterested investors. The government of any large group of people is likely to be a government by the minority. A college class consisting of 1000 members, for instance, holds a meeting to elect officers. Perhaps only one half of the members attend. Of these, a sizable group may have certain intentions and motives in common, but probably most of the others are indifferent or likely to swing with the wind. Stockholders in a widely held corporation are numerous and scattered. They are generally disinterested in the affairs of the company so long as dividends are paid and the stock has a chance of appreciation in value. There is no auditorium in the country large enough to accommodate the 700,000 owners of American Telephone and Telegraph stock or the 400,000 stockholders of General Motors. Most of them would not attend even if they could. They would not know what to do or how to vote if they did.

Our analogy with a class meeting is, of course, incomplete. The class member must vote in person, if he wants to vote at all, but, as a rule, the stockholder may vote either in person or by proxy. Each class member has only one vote, but the stockholder generally has one vote for each share held.

These have not always been the rules as to stockholder voting. Under the earlier common law when the king granted a charter to a group of his "trusty and well-beloved" subjects, it was understood that they were to exercise their voting privilege in person. Moreover, each shareholder had only one vote regardless of the size of his holdings. In these respects the government of the early corporation resembled that of the partnership.

Gradually the law and practice changed. The common-law rule was considered to apply primarily to public corporations, such as cities, and to nonprofit private corporations with no capital stock

outstanding. Legislatures began to provide, or with the sanction of law incorporators began to insert a provision in the charter, that a stockholder should have a vote proportional to the number of shares, most frequently one vote per share.* Moreover, an increasing number of corporations, by statute or by the charter or even by the bylaws, were permitted to allow a stockholder to vote by proxy. These two changes—namely, proxy voting and the giving of voting rights in proportion to the number of shares—aided greatly in divorcing the control from the ownership of the widely held corporation.

The proxy. When the management sends notice of the annual meeting, it also encloses a proxy, with the request that the stockholder sign and return it. Under the rules of the Securities and Exchange Commission anyone soliciting a proxy must furnish the information of who is seeking the proxy and who is bearing the expenses of the solicitation. This proxy generally delegates to some designated individual or committee the authority to vote for directors and on other special matters at the forthcoming stockholders' meeting. In the form sent out by the management those designated to be the proxy holders are officers or directors of the corporation. Any individual may solicit proxies. The proxy represents a mere agency and, as a general rule, may be revoked at will.†

The purpose of the proxy was mainly to guarantee the "attendance" of a quorum of the shares, which by statute is often the majority of the voting shares, but the effect has often been startling. To cite one instance, at a meeting of the United States Steel Corporation, the Chairman, at the time Mr. Myron C. Taylor, stated that he was acting as proxy and representative of the holders of 2,060,760 shares of the preferred stock and 5,385,207 of the common stock. There were 3,602,811 shares of preferred and 8,687,435 of

* Some commentators state the common law as follows: In the public corporation and in those having no capital stock, the members' interests are equal; therefore, each member should have one vote. In the modern business corporation, however, some members have a greater interest than others. The common-law rule of equality as applied to such companies logically grew into the rule that each stockholder in a business corporation will have a vote proportional to the number of his shares. See 63 *American Law Reports,* p. 1107.

† The rule that a proxy is a mere agency and may be revoked at will is intended to prevent the stockholder from becoming "bound" indefinitely. A stockholder may sign a proxy and then vote personally at the stockholders' meeting, if he decides to attend. This voting in person, of course, revokes the agency. It is possible for a proxy to be irrevocable if it is "coupled with an interest," as lawyers say—that is, if the holder of the proxy has a direct financial interest in the authority given him.

common outstanding. The preferred happens to have the same vote as the common, one vote per share. Mr. Taylor, it will be seen, controlled more than one half of the votes of the corporation.

The Chairman then asked if there were any stockholders present in person or any persons present as attorneys or proxies for stockholders. The following stockholders (they owned no preferred stock) then appeared: In person, Thomas W. Bentley (560 common shares), John L. Osgood (2025), Charles B. Schellenberg (160); by proxy, Edward Howland Graham (2100), Moore, Leonard & Lynch (100), J. R. Timmons & Co. (3323).

The Chairman then asked the secretary to report the number of shares represented either by proxy or in person or by attorney, which was: preferred, 2,060,760; common, 5,393,475; total, 7,454,-235.

It will be noted that the Chairman controlled practically all the votes cast at the annual meeting.* It will also be noted that only about 60 percent of the total shares were represented at the annual meeting. The remainder were held by individuals who did not bother to return their proxies.

The stockholder may designate anyone he wishes as his proxy holder or he can act as a proxy holder himself and solicit proxies from others. The limited scope of any one stockholder's influence and acquaintance seriously hinders the practicability of a one-man proxy campaign. Moreover, the cost is generally borne by the persons soliciting the proxy.

There have been bitter "proxy battles" in which some stockholder not a member of the management has attempted to gather up proxies in order to oust the board or to defeat some proposed action, such as a merger with another company. The most famous are the attempt of John D. Rockefeller, Jr., barely successful, and then only at great expense to Mr. Rockefeller, to oust Robert W. Stewart from the chairmanship of the board of Standard Oil of Indiana; and the Bethlehem Steel-Youngstown Sheet and Tube merger fight in which opponents of the merger attempted to obtain control over enough shares of Youngstown, either by purchase of the stock or by securing proxies, to defeat the merger. The Standard Oil battle took place in 1929 and that involving Youngstown in 1930. If the Standard Oil

* Judge Gary, long the chief proxy holder of the United States Steel Corporation at the annual meetings, frequently stated that with the exception of one or two years he had "voted" the stock of the corporation since its organization in 1901.

battle was a hard struggle for Mr. Rockefeller, what chance would the rest of us have in a similar situation?

If a stockholder signs a proxy form and returns it to the corporation, he plays into the hands of the management. If he throws it in the wastebasket, he may, if a quorum has been secured, also play into the hands of the management.* The more widely the shares are held, the easier it is for a minority or for the management to perpetuate itself in control. Frequently, therefore, the management is interested in keeping the prices of the voting shares low by means of split-ups and stock dividends. This encourages and permits the little man to buy its shares. Incidentally, many corporations regard their stockholders lists as a good advertising and propaganda medium.†

2. **The classification of securities.** The issuing of comparatively large amounts of bonds and nonvoting preferred stock and a relatively small amount of compactly held voting stock is one form of classification. ‡ One of the most interesting forms of classification was that used by the old Rock Island Company of New Jersey. This company, which went into the hands of receivers in 1916, controlled the Chicago, Rock Island & Pacific Railroad Company of Iowa, which in turn controlled the Chicago, Rock Island & Pacific Railway Company of Illinois, the top operating organization. This pyramid attracted considerable attention in the era before World War I, and has often been referred to in treatises as a first-class illustration of financial manipulation.

Compared with the later holding-company developments in the 1920's, when six or seven layers of corporations were common, the Rock Island arrangement seems small-time today. But the banker-

* Though under the common law a quorum for a stockholders' meeting constitutes merely those who actually attend plus those who are represented by proxy, even though they are only a minority of the total, statutes and corporate bylaws often stipulate that a quorum must be a majority of the outstanding voting stock.

† Lewis D. Gilbert has become known as "America's minority stockholder number one." He makes it a practice to hold stock in a large number of corporations, his holdings ranging from 10 to 100 shares. In 1947 he planned to attend 90 to 100 meetings of stockholders. His activities at meetings have "ranged all the way from a near fisticuff bout with the President of the Bethlehem Steel Company to a successful intercession with a utility company head on behalf of a housewife who needed a new stove." In "Observations" by A. Wilfred May, *The Commercial and Financial Chronicle,* Feb. 6, 1947, p. 737.

‡ Incidentally, the very "far off" nature of the corporate mortgage and the issuance of bonds based thereon have served to accomplish a split among the owners of the bonds and between the owners of the bonds and the holder of the mortgage.

managers of the old Rock Island Company were not shy. This top company had outstanding $96,000,000 of common stock and $54,000,000 of preferred stock. Our present interest in this illustration lies in the fact that the preferred stock had the right to elect five of the nine members of the board of directors. The preferred stock sold substantially below par, and the financial manipulators to whom it had been issued controlled the huge Rock Island Railway system by means of a cash investment worth somewhere between $16,000,000 and $17,000,000.*

Often stocks were given different voting rights. The common stock of the Cities Service Company was entitled to 1/20 of a vote per share. The company in 1929 sold to Henry L. Doherty & Company one million shares of new $1 par preferred stock. This was given one vote per share. The relation between the quantities of common and preferred shares outstanding was such that Doherty was able to cast 27 percent of the total votes. The control by the Doherty interests over this sprawling billion-dollar organization was clinched by the fact that the shares not held by Doherty were held by some 459,458 holders scattered all over the world.†

A practice which was virtually unknown before the 1920's was the classification of common stock into voting and nonvoting. The most publicized, though by no means the most unsavory, illustration of this was Dodge Brothers, Incorporated. In 1925 the investment banking firm of Dillon, Read & Company bought the Dodge automobile business for $146,000,000 and incorporated a new company, Dodge Brothers, Inc., to which it transferred the assets just purchased. The firm then caused the new company to issue to it in payment for these assets $75,000,000 par of debentures, 850,000 shares of preferred stock, 1,500,000 shares of Class A nonvoting common, and 500,000 shares of Class B voting common. The A and B common were similar in all respects except in the voting right.

* W. H. Lough, *Business Finance,* Ronald Press, 1919, p. 287.

† A. A. Berle and G. C. Means, *The Modern Corporation and Private Property,* Macmillan Co., 1933, p. 76. The Federal Trade Commission reported that "prior to May 1, 1929, Henry L. Doherty exercised the practical control of Cities Service Company." The issuance of the preferred stock thus really strengthened Doherty's control. *Utility Corporations—Summary Report* of the Federal Trade Commission to the Senate of the United States, pursuant to Senate Res. No. 83, 70th Congress, 1st session, No. 72A, p. 139. This report will be referred to simply as *Utility Corporations,* No. 72A. This summary report of the investigation of utility corporations by the Federal Trade Commission is "must" reading for anyone interested in the policies and practices of holding companies in the utility field.

Dillon, Read & Company sold the debentures to the public for $75,000,000 cash and the preferred stock (including a bonus of one share of Class A stock with each share of preferred) for $85,000,000. The banking firm thus received $160,000,000 cash for their $146,000,000 outlay, but they retained the entire amount of Class B voting common stock, thus giving them the control of the company.* In regard to this transaction Professor Ripley exclaimed in his famous exposé of corporate practices: "Isn't it the prettiest case ever known of having a cake and eating it too?" † In arranging the details of such classified common stock, the financial managers generally gave the higher "grade," namely A, to the nonvoting stock, since it was sold to the public. To the voting stock they gave the lower "standing" of B.

Another form of classification into voting and nonvoting, already referred to, is that by which preferred is deprived of its vote, while the common has the vote. This form of classification is not so fundamentally unsound, however, as the classified common. The preferred stock may be considered as giving up its voting rights in return for certain privileges and contingent controls. These privileges may not be worth much, however, and the contingent control is frequently taken too late to give any substantial protection.

3. **"Trick" devices.** The human mind is resourceful, and corporation finance furnishes innumerable incentives for human ingenuity. Dozens of trick devices have been invented to guarantee control in a minority group of stockholders or in the management. Mr. Doherty, for instance, strengthened his minority control of Cities Service by providing in the stock contract that the terms of the board of directors be staggered in three groups, only one of which was to leave office in any one year. Thus, if some opposing interests did get a majority control or a majority of the proxies, they would have to dominate the election of directors two years in succession in order to oust the Doherty interests. ‡ Such control two years in succession may be difficult to accomplish.

* W. E. Weld and A. S. Tostlebe, *A Case Book for Economics*, Ginn & Co., 1927, p. 142. The portion of the Class A stock not given as a bonus was also retained by the bankers.

† W. Z. Ripley, *Main Street and Wall Street*, Little, Brown & Co., 1927, p. 87.

‡ *Utility Corporations*, No. 72A, pp. 142-43. There is nothing essentially wrong about this staggering of directors. As a matter of fact it helps to preserve continuity in management. But, accompanied by manipulation and special voting rights, the staggering may become an instrument of abuse.

Another method is the voting stock reserve. A minority in control arranges an authorization of a large quantity of additional voting stock to be issued whenever the board so decides. If the control is threatened, the directors merely sell the additional voting stock, probably to the minority group in control. To make this possible, the common stock must have been deprived of its pre-emptive right, which is permitted by charter provision in some of our states. This is sometimes referred to as the "blank stock" method.*

4. **The voting trust.** Sometimes it has seemed desirable or necessary to deprive the stockholders for a time of their right to elect the directors. This is done by the voting trust, under which the voting shares, or at least a controlling portion of them, are turned over to some three or five trustees, who acquire most of the legal rights of the stockholders, including the right to elect the directors.

The voting trust differs from the proxy in the following respects: (1) The proxy creates a short-time relation revocable at will, while the voting trust is established for a specified term, such as five or ten years, or for a period the length of which depends upon the happening of a stipulated event or the accomplishment of a certain purpose. (2) The proxy creates a principal-and-agent relationship, the proxy holder presumably voting according to the will of the stockholder, while the voting trust gives broad, independent discretion to the trustees. (3) Under the proxy the stock remains in the possession of the stockholder, while in the voting trust it is turned over to the trustees, who, in turn, issue new securities called voting trust certificates, to the old stockholders, these certificates being transferable and carrying the right to receive any dividends paid. (4) Under the proxy the person delegating the power to vote retains the title to the stock on the books of the corporation, while in the voting trust the trustees become the legal owners, the old stockholders receiving a sort of beneficial or equitable title.

As is true of any other trust, the voting trust cannot be created in perpetuity.

Under the common law, when the state granted a charter to a group of incorporators, the understanding was that they or their successors would vote their shares in the corporation. Some courts, for instance, those in Connecticut and North Carolina, considered the voting privilege as attached to the ownership of a share. In such states, in the absence of a permissive statute, the voting trust was

* *Ibid.*, p. 144. See also A. A. Berle and G. C. Means, "Corporations and the Public Investor," *American Economic Review*, Vol. XX (1930), p. 64.

considered contrary to public policy. In other jurisdictions, including Massachusetts, Vermont, and Virginia, voting trusts were held to be legal if they were formed to carry out some specific policy and to promote the best interests of all the stockholders or of the corporation.*

Because of the uncertain status of the voting trust under the common law, many legislatures have enacted statutes positively legalizing this device but at the same time limiting its use. The voting trust, however, has sometimes been used for such unsocial purposes as to intrench a group in control. The Insulls and Halsey, Stuart & Company owned a strong interest in Insull Investments, Inc., which, in turn, held control over four top-layer Insull companies. In 1929 the Insulls and the Halsey Stuart interests organized Corporation Securities Company. At about this time, Continental Shares, Inc., an investment trust dominated by Cyrus Eaton, was considering the possibility of wresting control of some of the Insull top utility-holding companies, particularly Middle West Utilities Company, from the Insulls.

To combat Eaton and to solidify the voting power of Insull and associates, the promoters of Corporation Securities Company turned over to it their holdings of common stock in Insull Utility Investments, Inc. In return, the new company issued 1,000,000 shares of common stock to Halsey, Stuart & Company and 1,000,000 shares to the Insull family. These 2,000,000 shares were then deposited in a five-year voting trust, the Insulls and Halsey, Stuart & Company receiving trust certificates. Samuel Insull, Sr., Samuel Insull, Jr., and H. L. Stuart, of the banking firm, were appointed trustees. In effect, therefore, the owners of the trust certificates and the trustees were the same persons. They were free, therefore, to sell these certificates without impairing their control over Corporation Securities Company and could then use these funds for extending their influence in other directions.†

The voting trust often has its origin in fear or distrust or lack of confidence. The stockholders of competing companies who get together in a merger may so distrust each other for a while that they agree to turn a temporary but real control over to trustees. Warring factions within a corporation may decide to intrust the control to

* *In re Morse* (1928), Court of Appeals of New York, 160 N.E. 374.

† *Utility Corporations,* No. 67, p. 714, and No. 72A, pp. 146-47. It is not known exactly how many of these voting-trust certificates were sold by Halsey Stuart and the Insulls.

some group representing one, or perhaps none, of the antagonistic elements. Important stockholders constituting a large controlling minority may fear that some outside speculators will attempt piece by piece to buy up stock so as eventually to grasp the control of the corporation. To protect themselves they place their shares in a voting trust.

A few other situations may be summarized. Partners with equal rights in the management of a partnership but unequal shares in the capital decide to incorporate. They agree that stock is to be issued to them in proportion to their former holdings in the firm. This would give unequal shares in the management of the corporation. These business associates could insure equality in the management of the new corporation by creating a voting trust for the stock, with themselves as both the trustees and the owners of the voting-trust certificates. Each trustee has one vote. The trustees could then decide questions by a majority vote as they did when they were partners. A dominant stockholder may wish to retire from the active management of a corporation and leave his interest to his son, but not having great confidence in the boy, he may set up a voting trust. Corporations planning to cooperate in the use of a joint facility or in the interchange of traffic, or in the exportation of goods, or in some other form of cooperative endeavor may not wish the matter to be left completely up to the separate managements. The shareholders may in such case arrange for the stock of the various companies to be turned over to a voting trust.*

The most important present, as well as early, use of the voting trust comes in connection with the corporate reorganization process. If the stockholders of the old company are to become shareholders in the new, or in the old with an amended charter, they cannot be trusted with immediate control. If the old shareholders have no equity and are completely wiped out, the holders of some prior secu-

* Incidentally, such form of cooperation was one of the early purposes of the voting trust. Harry A. Cushing in *Voting Trusts,* Macmillan Co., 1915, pp. 5-6, cites the fact that in 1872 the common stock of the St. Louis, Kansas City & Northern Railroad was placed in the hands of four trustees for the purpose of carrying out an agreement for the interchange of traffic among this road and the Pennsylvania Company, the Chicago, Alton & St. Louis Company, and the Kansas Pacific Railway. In 1880, some four fifths of the common stock of the Atlantic and Pacific was transferred to three voting trustees in order to insure a continuance of joint control by the Atchison and the Frisco.

The other early use of the voting trust was in the operation of reorganized railroads. Arthur S. Dewing, *Corporation Finance,* Ronald Press, 1931 ed., p. 182, states that the earliest case of the voting trust was in 1864.

rity may become the new shareholders. They likewise should probably not at once be given full control of the patient. The usual procedure in either case is the appointment of voting trustees for a definite period, often five or ten years. The voting stock is then trusteed to these trustees who in turn select the members of the board of directors.

Summary. There are two phases to the problem of corporate control. The first and less important is the protection of the minority owners of the corporation from the aggression of the majority owners, especially in the small, closely held company. A possible method of achieving this is by cumulative voting.

From a social point of view, the more important phase is the protection of the majority from the tyranny of the minority. We have seen in the preceding chapter that majority control has given way with the rise of the professional manager in many instances. Other situations have worked against control by the majority, notably that in which a large number of voting shares are owned by widely scattered, uninterested, and consequently powerless holders. They exercise their franchise by a proxy generally made out in favor of the management already in control, which well may be the representatives of an active minority. In other situations, stock has been so classified as to concentrate control in a small vote. Today nonvoting common stock has been virtually outlawed by various statutes and regulatory agencies. Among the "trick" devices which have been used to secure minority control have been the staggering of terms of directors and the resort of the inside group to the issuing of additional voting stock to themselves, when they feared their control was threatened by the infiltration of "outsiders."

The voting trust has been used in situations where it was thought necessary for a time to separate control from the stockholders. This is frequently provided for in the usual reorganization plan under which a board of trustees has the authority, for a limited period of time, to elect the directors, who then select the officers and determine the general operational and financial policies of the reorganized company.

PROBLEMS

1. The 100 outstanding shares of Pacific Wood and Coal Company were owned by six stockholders. There were five directors to be elected under cumulative voting. The shares held and the total votes of each shareholder were as follows:

	Total shares	Total votes
B. D. C. (Clugston)	44	220
E. G. D.	25	125
G. G. G.	25	125
J. E. A.	4	20
L. C. (daughter of B. D. C.)	1	5
J. W.	1	5
	100	500

All the stockholders received votes for the Board of Directors. B. D. C. split his vote evenly among B. D. C., L. C., and J. W.; E. G. D. split his evenly among G. G. G., J. E. A., and E. G. D.; G. G. G. split his evenly among G. G. G., J. E. A., and E. G. D.: J. E. A. split his evenly among L. C., J. W., G. G. G., J. E. A., and E. G. D.; L. C. split hers evenly among B. D. C., L. C., and J. W.; and J. W. split his evenly between B. D. C., L. C., and J. W. (From *E. G. Dulin* v. *Pacific Wood and Coal Co.* (1894), 103 California 357.)

How did this election turn out? If B. D. C. had known that some of the others would concentrate their votes as they did, how could he have changed the results?

2. In which instance would you say the case for private property would be the stronger: where the property is directly administered by its owner, or where there is a breach between ownership and control? How does this question concern the subject of corporate control? (See Kenneth E. Boulding, *The Economics of Peace,* Prentice Hall, Inc., 1945, p. 230.)

3. Explain the reasoning behind this statement:

> The corporate system has done to capital what the factory system did to labor. As the factory system separated control from labor, so the corporate system has separated control from ownership. (A. A. Berle in *Encyclopedia of Social Sciences,* article "Corporation.")

Chapter 29

The Problem of Control—The Holding Company

THE problem of control has another phase besides the two discussed in Chapter 28—the holding company.* We have referred frequently to the holding company in various connections, but it is worth restating here the circumstances which led to its origin and widespread growth.

Historical background. For years the general rule was that a corporation could not legally hold stock in another corporation for purposes of control, unless such power had been specifically granted to it by special statute. Since a corporation is organized under the law for specific purposes named in the charter, the indiscriminate purchase by it of large quantities of stock in other companies, regardless of the nature of their business, might cause it to enter industries substantially different from those authorized by the charter. The security holders could thus be subjected to unanticipated risks. As a general rule, of course, a corporation was permitted in good faith to invest its surplus funds in securities, including the stock of other corporations.

* By a holding company is generally meant an individual, usually a corporation, which owns or holds sufficient voting securities in another corporation to enable it to elect a majority of the board of directors. Some writers draw a distinction between a holding company and a "parent company." They consider a company as a holding company if its primary and probably entire function is to hold stock in other companies. (This is also referred to as a "pure" holding company.) On the other hand, a parent company is one which engages both in actual operations and in the holding of a controlling interest in one or more subsidiaries. Unless otherwise stated in the context, we shall use the words "holding company" in the more general sense to include both pure holding companies and parent companies—that is, any company which owns substantial and controlling quantities of the voting stocks of another company. Sometimes a special meaning is given to the term "holding company," as that given by the Public Utility Holding Company Act of 1935. See page 543 of this chapter.

Though a number of companies here and there were given authority by a special charter of the legislature to buy and hold stock in other corporations for the purpose of control, the state of New Jersey (by several acts, the chief one in 1888) was the first to permit corporations organized under the general law to hold stock in other corporations. This accommodation by New Jersey came in the nick of time for the promoters. Courts were outlawing the trust; the pool was proving ineffective; combination managers were finding the full sale of the assets inexpedient and extremely difficult to bring about. Companies eager to combine and promoters anxious to bring about combinations were looking for more effective mechanisms of control. New Jersey at the turn of the century became the mecca for ambitious organizers of holding companies.

Reasons for choice of holding company as a device for control. There are four basic reasons for the choice of the holding company over the other proprietary devices for combination.* These are:

1. Personal considerations.
2. Political expediency.
3. Ease of arrangement.
4. Possibility of financial manipulation.

1. *Personal considerations.* If two or more companies are consolidated by means of the merger, all of them, except the acquiring company, lose their identity and separate existence. The one company then owns all the merged assets. There is only one set of officers and employees. If on the other hand the holding company device is used, the constituent companies maintain their own existence and their separate sets of officers. The officers in a subsidiary company go on, to all appearances, the same as usual, and in this way faces and jobs can often be saved. This has been given as one of the reasons for the organization of the United States Steel Corporation as a holding company rather than formation of a merger of all the constituent companies.†

If certain corporate names have become associated with a trademark and if they have developed a good-will value, the promoters may wish to retain the corporate entity. Even many mergers have retained divisional names which are exploited or cultivated by ad-

* The chief forms of proprietary consolidation are the holding company, the merger, and the lease. Our discussion is concerned with the comparison mainly of the holding company and the merger.

† Kenneth Field, *Corporation Finance,* Ronald Press, 1940, p. 53.

vertising. The various divisions of General Motors, such as Chevrolet Motors, furnish a familiar illustration.

Companies may establish subsidiaries for engaging in businesses which for some reason they do not wish connected in the public mind with their own names. Thus, a manufacturer of durable equipment may organize a separate financing corporation or a separate organization for disposing of second-hand equipment.

Many companies organized in one state or country have attempted to circumvent tariff barriers, evade regulation, or even obtain anonymity by organizing a subsidiary under a different jurisdiction. World War II uncovered several companies which had been chartered in a foreign country and which supplied goods to the enemy though they were really owned by American stockholders.

2. *Political expediency.* The people of the United States are extremely "state conscious." We often dislike "foreign corporations." If a foreign corporation—that is, a corporation chartered by another state or by another country—is not a federal instrumentality or is not engaged in interstate commerce, a state may keep it out altogether or let it in under harsh terms. After it is admitted there may continue to be discriminations of various kinds, even though such foreign corporation must theoretically be treated equally under the laws with domestic corporations. A large corporation, such as the American Telephone and Telegraph Company, often will establish a separate organization in each state or in groups of states in which it wishes to operate. These separate companies operate in, and to all appearances owe "allegiance" to, the state under which they exist. The holding company device is ideal for this practice.

3. *Ease of arrangement.* To bring about a merger, it may be necessary first to obtain all the stock of the company to be merged. There may be endless disputes about the relative values of the companies. A small but well-organized minority may prevent the combination or at any rate build up considerable "nuisance value." In the case of the merger, some difficulties may also develop in assuming the existing mortgages on the properties of the dissolved companies. The use of the holding company can avoid these difficulties. If the company can lay its hands on the majority or a controlling interest of the voting stock of an organization, the minority stockholders, as well as the holders of mortgage bonds and other nonvoting securities may be left undisturbed; in fact, they may be hardly aware of the change in the management.

Closely related to this advantage is the ease of divestment or divorce of an unwanted company. A holding company can shed off a subsidiary with relative ease by selling the stock to outsiders or by distributing it as a dividend to its own stockholders. The Chesapeake and Ohio Railway found it very simple to eliminate its control over the New York, Chicago, and St. Louis Railway (Nickel Plate) by distributing its stock holdings in this subsidiary as a dividend to Chesapeake and Ohio stockholders.

4. *Possibility of financial manipulation.* The holding company arrangement permits and encourages a pyramiding of investment and control. It is the ideal device for the promoter or speculator who wishes to control the maximum of assets with relatively little investment and who wishes to magnify his profits (as well as, alas, his losses).

The accompanying table shows the possible effect of the pyramiding of companies. The operating companies are *A*, *B*, and *X*. *A* and *B* are subsidiaries of Holding Company I, and *X* is a subsidiary of Holding Company I*A*. Holding Companies I and I*A* are in turn subsidiaries of Holding Company II. Holding Company II is controlled by Holding Company III. The control in all cases is through the ownership of 100 percent of the common stock. The bonds and preferred shares are held by the public. The bond interest and preferred dividend rate in all cases are assumed to be 5 percent. The full earnings to the common stock are distributed as dividends. The earnings are shown for three years, 1945, 1946, 1947, with the capital structure unchanged.*

* In practice, an infinite variety of conditions is possible. The holding company may control less than 100 percent of the common stock of the subsidiaries, and it could own some of the other securities issued by them. The capital structures may be more (or less) complex. The bonds and the preferred stock will actually not carry the identical rate of interest and of dividend. The subsidiaries may pay out less (or even more) than their earnings as dividends. The holding companies do not necessarily carry the stocks of the subsidiaries on their books at the par or stated value. They would probably carry such stock at a value greater than par, especially if the subsidiary companies have substantial surplus accounts. Any one of the holding companies, for example, I and II*A*, could also engage in operations. As we have already mentioned, companies which perform both operating and holding functions are often called parent companies.

In our table the expenses of the holding companies are ignored, all their income being considered available for interest and dividends. The table contains only a portion of the companies in the hierarchy, each holding company also having control over other subsidiaries. It was thought best, therefore, to make no calculation for the expenses of the holding companies.

THIRD-DEGREE HOLDING COMPANY

Holding Company III

Common stock in Holding Company II .. $1,000,000
Bonds outstanding $500,000
Common stock outstanding 500,000

	1945	1946	1947
Income of Holding Company III	$50,000	$450,000	000
Bond interest	25,000	25,000	Def.
Available for common stock	25,000	425,000	Def.
Percentage earned on common stock	5%	85%	

SECOND-DEGREE HOLDING COMPANY

Holding Company II

Common stock in Holding Company I ... $1,000,000
Common stock in Holding Company IA .. 2,000,000
Bonds outstanding.... $1,000,000
Preferred stock........ 1,000,000
Common stock........ 1,000,000

	1945	1946	1947
Income of Holding Company II....	$150,000	$550,000	000
Bond interest....................	50,000	50,000	Def.
Preferred dividends	50,000	50,000	Def.
Available for common stock........	50,000	450,000	Def.
Paid to common stock..........	50,000	450,000	Nil

FIRST-DEGREE HOLDING COMPANY

Holding Company I

Common stock in Operating Company *A*	$2,000,000	
Common stock in Operating Company *B*	1,000,000	
Bonds		$1,000,000
Preferred stock		1,000,000
Common stock		1,000,000

	1945	1946	1947
Income of Holding Company I	$175,000	$400,000	$100 000
Bond interest	50,000	50,000	50 000
Preferred dividends	50,000	50,000	50,000
Available for common stock	75 000	300,000	000
Paid to common stock	75,000	300 000	000

FIRST-DEGREE HOLDING COMPANY

Holding Company IA

Common stock of Operating Company *X*	$4,000,000	
Bonds		$2 000,000
Common stock		2,000,000

	1945	1946	1947
Income of Holding Company IA	$175,000	$350,000	$100 000
Bond interest	100,000	100,000	100,000
Available to common	75,000	250 000	000
Paid to common	75,000	250,000	000

Operating Company *A*

Operating assets	$7,000,000	
Bonds		$3,000,000
Preferred stock		2,000,000
Common stock		2,000,000

	1945	1946	1947
Net operating revenue	$350,000	$500,000	$300,000
Bond interest	150,000	150,000	150,000
Preferred dividends	100,000	100,000	100,000
Available to common	100,000	250,000	50,000
Paid to common	100,000	250,000	50,000

Operating Company *B*

Operating assets	$4,000,000	
Bonds		$1,000,000
Preferred stock		2,000,000
Common stock		1,000,000

	1945	1946	1947
Net operating revenue	$225,000	$300,000	$200,000
Bond interest	50,000	50,000	50,000
Preferred dividends	100,000	100,000	100,000
Available for common	75,000	150,000	50,000
Paid to common	75,000	150,000	50,000

Operating Company *X*

Operating assets	$9,000,000	
Bonds		$5,000,000
Common stock		4,000,000

	1945	1946	1947
Net operating revenue	$425,000	$600,000	$350,000
Bond interest	250,000	250,000	250,000
Available to common	175,000	350,000	100,000
Paid to common	175,000	350,000	100,000

THEORETICAL EFFECTS OF PYRAMIDING

From these figures it is possible to conclude that:

1. A small change in the net revenues of the companies up the line results in a relatively large change in the net income of the top organizations. In 1945, for instance, the net operating revenue of Companies *A*, *B*, and *X* aggregated $1,000,000, and the amount available for the common stock of Holding Company III was $25,000. For 1946 the total net operating revenues were $1,400,000, an increase over 1945 of 40 percent, but the earnings on the common stock of Holding Company III skyrocketed from $25,000 to $425,000.

The sad part of this story, however, comes in 1947 when the net operating revenues of *A*, *B*, and *X* total $850,000, a drop of only 15 percent from 1945, but Holding Companies I and I*A* then barely cover interest and preferred dividends, there being nothing left over for their common stock. Companies II and III, as a result, suffer large deficits.

2. A relatively small investment permits a control over large quantities of assets. The ownership of a little more than $250,000 par value of the common stock of Holding Company III insures domination over operating assets of $20,000,000. If each company held less than 100 percent of the common stock in the company below, this control would be magnified all the more. If the common stock of Company III sells for less than par, the amount of investment required will be even lower than $250,000.

3. If a company trades on the equity, the extension of control and the magnifying of profits or losses will be greater than if it has a capital structure composed of only common stock. If all the companies in our system had only common stock outstanding, there would have been some earnings available for the common stock in all instances, even in the poorest year.

4. Bonds and preferred stock issued by the top holding companies really represent only an inferior claim to assets and earnings. Before anything is available for the bonds of Holding Company III, for instance, the following must have been paid in order: interest on the bonds of *A*, *B*, and *X*; dividends on the preferred stock of *A* and *B*; dividends on the common stock of *A*, *B*, and *X*; interest on the bonds, dividends on the preferred stocks, and dividends on the common stock of Holding Company I and interest on the bonds and dividends on the common stock of Holding Company I*A*; interest on the bonds and dividends on the preferred and common stock of Holding Company II.

To refer specifically to the hierarchy from Holding Company III down to *A* and *B*, we note that nine prior payments must be made before anything is available for the interest on the bonds of Company III.

5. The distribution by the operating companies of only a part of their available earnings would have greatly reduced the net income of the holding companies. If, for instance, in 1946, the operating companies had withheld one half of their income while Holding Companies I and I*A* and II had distributed everything, the earnings on the common stock of Holding Company III would have been reduced from $425,000 to only $50,000. The stockholders of the top companies will, accordingly, tend to favor liberal dividend policies by the companies below.

6. In the bad year, 1947, when Holding Companies II and III did not receive enough income even to cover interest on their outstanding bonds, Operating Company *A* earned its interest twice, *B* four times, and *X* 1.4 times. The top companies do furnish some advantage of diversification, of course, but they are on the wrong end of the lever during adversity. Securities issued by an operating company may constitute a stronger investment than those issued by its holding or parent company.

Evils and abuses. The holding company is inherently a good form of organization. By facilitating cooperation among companies, it permits the averaging of peak loads for connected electric plants; it enables the development of service and research departments which could not be afforded by smaller and independent units; it sometimes makes for economical financing because it is a better known and more effective bargaining organization than any of its members. By maintaining the separate entity of each of the subsidiary units, a holding-company system may retain local good will, keep the names of individual companies before the public, and retain the loyalty of employees and officers of the associated members.

The idea of the holding company, like many good things, has often been abused. It was conceived during a period of government indifference and was nurtured in the soil of popular greed. Unscrupulous financiers long played on this indifference and greed and by the 1920's and early 1930's they had succeeded in giving to a basically sound arrangement a thoroughly bad reputation, particularly in the field of public utilities.

The most important evils and abuses of the holding company may be classified under three broad headings:

1. Excessive manipulation and pyramiding.
2. Frustration of utility regulation.
3. Confusion of the investor.

1. *Excessive manipulation and pyramiding.* We have already seen that the holding company has tended to permit and encourage pyramiding. But the pyramiding has been carried to excess. According to figures by the Federal Trade Commission, which admits that its findings tend to understate the evil, during the period 1929 to 1932, the heyday of the holding company, sixteen large holding companies controlled from three quarters to four fifths of the total electric energy generated in the United States. The United Corporation group controlled about one fifth of the total, the Electric Bond and Share about one seventh, and the Insull group slightly more than one tenth.*

We have already seen that the total amount of property that can be controlled by a given amount of funds at the top, as well as the return on such investment, will rise greatly with an increase in the number of steps in the pyramid and with an increase in the degree of trading on the equity. The smaller the proportion of the voting stock of each company held by the company immediately above, provided the control is assured, the greater also will be the amount of assets dominated by each dollar at the top. As the investors, particularly in the "new era" of the 1920's, peered through the financial field glasses, the holding-company pyramid was a sight that filled them with awe. But a peep through the other end during the late 20's and the early 30's gave them the shudders. The lever also worked in reverse. Tragically, a decrease in the earnings at the bottom was found to have a cumulative and accelerated series of impacts up the line.†

This principle of acceleration often tended to induce those in control at the top to do anything in their power to increase the earnings of the companies below. The top companies also wanted those

* *Utility Corporations,* Vol. 72A, p. 38.

† An extreme case of pyramiding was furnished by the Associated Gas and Electric companies, where in one line of control from top to bottom there were twelve companies. An investment of $1 by the Insull interests at the top permitted the control of $2000 worth of assets of the West Florida Power Company at the bottom of the Middle West Utilities portion of the pyramid. This was also an extreme illustration, but excessive pyramiding and trading on the equity in the Insull set-up was so common in this line of descent that, when the depression of 1929-33 hit the operating companies at the bottom of the pile, every holding company in this line went into bankruptcy. *Ibid.,* pp. 160-62. See Appendix N for description of the Insull system.

below to pay the largest possible dividends. An understatement of depreciation on the operating plant would exaggerate the net income of a company. If such company then paid out all its income as dividends, the effect really constituted a payment out of capital, especially if there was little accumulated surplus.

To illustrate, assume that a small electric operating company, controlled by a holding or parent company, has the following simplified balance sheet at the beginning of the year:

Gross utility plant	$2,000,000		Bonds, 5 percent....	$ 500,000
Less: Depreciation reserve...	200,000		Preferred stock, 6 percent	400,000
Net utility plant		$1,800,000	Common stock, 10,000 shares, par $100.....	1,000,000
Other assets, including current assets...		140,000	Current liabilities.. .	20,000
			Surplus.......... .	20,000

The company shows the following operating results:

Operating revenue.....	$450,000	
Operating expenses and costs of all kinds, including taxes, but not including depreciation for the year..	310,000	
Net operating revenue before depreciation		$140,000
Depreciation which should have been 3 percent of the gross value of plant, but is allowed at only 1 percent	20,000	
Net operating revenue................		120,000
Other income.......		..
Gross income... ..		120,000
Less interest on bonds. ..	25,000	
Net income..........		95,000
Preferred dividends...	24,000	
Available for common stock..		71,000
Dividends on common stock, $7 per share.. .	70,000	
Transferred (credited) to surplus....		1,000
Total surplus of the company (previous surplus of $20,000 plus transfer to surplus of $1,000)........		21,000

If the rate of depreciation for the year had been allowed at 3 percent, which we assumed to be the reasonable figure, the results would have read as follows:

Operating revenue	$450,000	
Operating expenses and costs of all kinds, but not including depreciation	310,000	
Net operating revenue before depreciation		$140,000
Depreciation	60,000	
Net operating revenue		80,000
Other income		
Gross income		80,000
Less interest on bonds	25,000	
Net income		55,000
Preferred dividends	24,000	
Available for common stock		31,000
Dividends on common stock	70,000	
Transferred (debited) to surplus	*Def.*	39,000
Total surplus of company (previous surplus of $20,000 minus $39,000 gives a surplus of minus $19,000 or a deficit of $19,000)	*Def.*	19,000

It is apparent from our figures that, by allowing inadequate depreciation for the year and by distributing dividends based on the resulting inflated net-income figure, this company has paid out part of its capital stock. As accountants and lawyers would put it, the company has "impaired its capital."

A holding company which forced its subsidiary to distribute most or all of its earnings or even to impair its capital was said to "milk its subsidiary." The dominant company also milked its subsidiary by having it capitalize certain of its expenses—that is, charge or add them to an asset account rather than to expense—thus keeping expenses down for the time and augmenting the amount available for dividends. In numerous other instances, even where net income was honestly figured, the holding company milked its subsidiary by causing it to distribute an unreasonably large proportion of its earnings.

The top holding companies frequently set up service staffs or established separate subsidiaries to give aid and advice to the operating organizations in the fields of accounting, finance, law, and research, and also in the planning and building of physical plants. The theory of such service organizations is excellent, but again there was abuse in practice. Services were sometimes "given" when not needed, and the charges were frequently greatly in excess of the cost. The additional profits augmented both the earnings of the company at the top and the "expenses" of the operating organizations.

2. *Frustration of utility regulation.* If the operating companies paid excessive service charges or were billed for services when not needed, did not these charges reduce their net operating revenue and thus decrease the amount of dividends that they could pay to the companies above? Where, then, it will be asked, was the gain to the holding company?

The objection just raised is well taken if the companies controlled by the holding corporations are industrial. Because of market conditions, a manufacturing or trading company may be unable to raise its prices without greatly reducing its sales. The demand for its product may be elastic. A competitor may always stand ready to take away its business.

But the overdevelopment of the holding company, with its accompanying intricate service organization, did not become prevalent in the industrial field. It came especially in that field of activity designated as public utilities. If a service which is a vital necessity to the great masses of the people in an area is produced under such conditions as to make the consuming public dependent upon a single company for its supply, such enterprise is likely to be considered in the law as a public utility.*

When a business becomes a public utility, its rates and services are regulated by the appropriate governmental authority. The company cannot take advantage of market conditions to raise its price at will, or even to lower it, nor can it select its customers. It must serve all applicants who are able to pay and are in a fit and

* The publisher of a textbook has a monopoly by virtue of the copyright, but he is not a public utility, because the book is not vitally necessary to a sufficiently wide segment of the population. Other competing books in the same line are available or capable of being produced. The producers of coal or of wheat certainly sell something that is indispensable to all. But coal companies and farmers are not public utilities, because their products are available from several or from many sources. The furnisher of water in an urban community controls something which is highly essential and indispensable. The relatively large investment and high fixed costs necessary to start and to operate a water company, together with the demands of public convenience, dictate that there be only one unit in any one community. The water company is, therefore, a public utility.

The concept of what constitutes a public utility is slowly changing. At its beginning, electric power was not considered a public utility. It was not yet a service of vital necessity to the great mass of the people in a community. Expanding use of electricity, together with the monopolistic nature of the industry, soon forced it into the public-utility class. The bottling and distribution of milk is not today a public utility, but the peculiar cost and supply situation in this industry may cause the public ultimately to be dependent on a small number of units for this highly important product.

proper position and condition to receive the service. It cannot expand or curtail its facilities without the consent of the authorities. The government generally also has jurisdiction over such matters as the accounting structure and the issuance of securities. These are burdensome restrictions.

But the utility company has some compensating privileges. It possesses the constitutional right, for instance, to have the rates set at a point which will at least give it a chance to earn a reasonable return on its investment. This means that, after paying all operating expenses and costs and taxes (including federal income taxes) and after allowing for depreciation and obsolescence, it should have enough left to permit the payment of a reasonable return to the suppliers of the permanent investment of the company. As some courts put this, the return should be such as to enable the company to maintain its financial integrity and to attract additional long-term funds in appropriate and adequate quantities.*

Let us assume the following condensed facts for an operating company:

Operating revenue	$100,000	
Expenses and costs, including depreciation, obsolescence, and all taxes, but not including interest on long-term debt or dividends on stock	75,000	
Net operating revenue		$25,000
Other income		
Gross income available for interest and dividends		25,000

The regulatory body now appraises the plant investment as being worth $400,000 and decides that a reasonable return would be 6 percent. The company should, therefore, earn about $24,000 before interest on the bonds.

This company seems to be earning about the right amount. If the above figures are fair and correct, there should be little justification on the part of either the company or the public for agitating for a change in the schedule of rates.

If, now, our company finds its expenses increased by $5000, it may put up a vigorous plea for a raising of its rates, which might

* See, for example, the statement of the United States Supreme Court in *Federal Power Commission et al.* v. *Hope Natural Gas Company* (1944), 320 U. S. 591 at 591 (headnote): "Rates which enable a natural gas company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed cannot be condemned as unjust and unreasonable under the Natural Gas Act, even though they might produce only a meager return on a rate base computed on the present fair value method."

or might not be heeded. If excessive service charges paid to a holding company are included under the expenses, they might possibly in this way be added to the rates charged the consuming public. If the holding company furnishes permanent benefits, such as an accounting system, or if it makes certain expenditures for organizing a company, it might cause the operating company to capitalize these —that is, to add them to the value of its assets or investment. The company would do this in the hope that the regulating commission would permit a return on this addition. In either case, whether they are a cost or an addition to the investment, the excess charges made by the holding company for its services might be passed to the consumer in the form of higher rates.*

A holding company which controls an operating utility might also have a subsidiary which furnishes supplies, such as coal. If these supplies are sold to the operating company at a great profit, the net income of the supplying company would be augmented, thus ultimately resulting in greater dividends to the holding corporation. The utility operating company which was forced by its holding company to pay too high a price for its coal might also attempt to include these exaggerated costs for coal under the expenses used as a basis for rates.

Another common practice among holding companies was stock watering. This generally took the form of substantial write-ups in the value of assets of operating companies, as well as of those of holding companies. The most important forms of such asset inflation included:

1. The charging of high prices by the holding company's service organization for constructing, or aiding in the construction of, permanent facilities for subsidiaries, these excess prices and profits being included in the cost and reported value of the assets of such operating companies. Reference has just been made to this practice.

* The subject of utility rate regulation is extremely complex and highly controversial. The chief questions are: (1) What expenses should be allowed? (2) What is a reasonable rate of return? (3) What is the value of the investment, and how should it be determined? In addition to the standard books on public utilities, the reader is referred to two more general treatises: Harold D. Koontz, *Government Control of Business*, Houghton Mifflin & Co., 1947, Part 3, "Control of Public Utilities"; and Charles C. Rohlfing *et al.*, *Business and Government*, Foundation Press, 1941 ed., Chs. VIII and IX. For a short but excellent summary of current problems, see William H. Anderson, "The Supreme Court and Recent Public Utility Valuation Theory," in *Journal of Land and Public Utilities Economics*, Vol. 21 (February 1945), pp. 12-22.

2. The inclusion under assets of such fictitious and unreal items as discounts on the sale of stock and bond issues, uncertain "water rights," and the capitalized value of economies anticipated from a combination of separate companies.

3. The sale of assets by one subsidiary to another subsidiary at a profit, and the inclusion of such property as an asset at its "purchase price," the net profit to the selling company being distributed as a dividend on the stock held by the holding company.

4. The listing of the common stock of a subsidiary on the books of the holding company at a figure substantially in excess of its proved value. If the stock was acquired by means of a cash payment, the holding company sometimes boosted its value as a basis for selling additional securities, perhaps collateral trust bonds, perhaps stock, to the public. The company thus received additional money to enable it to enter fresh pastures in search of stock of other corporations. If the holders of stock of a company to be acquired were to be paid by an exchange of their stock for that of the holding company, they were likely to demand, and if their bargaining position was strong, to receive, a total par value or stated value far in excess of the value of the stock which they delivered to the holding company. The holding company, in turn, was practically certain to list the stock so obtained at this boosted value.

The motives for write-ups were generally twofold: (*a*) to increase the investment base of the operating company for the purpose of rate making,* and (*b*) to furnish an apparent justification for the

* A controversy has long existed as to whether the watering of the stock of an operating utility can be reflected in higher rates. In regard to this, James L. Dohr says: "It is difficult to see how the arbitrary write-ups of the past have rendered [public utility regulation] a sham. Rate regulation has generally been based on a fair value determined after giving consideration to original cost and cost of reproduction; if the arbitrary and fictitious write-ups of the past have been permitted to affect rates, the regulatory commissions are subject to severe indictment." From "Power Price Fixing," *Journal of Accountancy*, Vol. 80 (July 1945), p. 21.

The logic of this contention is indisputable, but it should be pointed out that the purchasers of securities based upon pumped-up values may exercise political pressures for the approval of rates high enough to give a substance of the water. This psychological and political effect is, of course, difficult to prove or to measure. Rates which attract capital and permit the company to maintain its financial integrity and to operate effectively are reasonable rates regardless of whether they give an adequate return on securities previously bought by the investor at an artificially high price. In this respect, it may be said that it is future anticipated values, not inflation and write-ups, that influence the rate structure.

issuance of additional securities to the public or to the next holding company at this inflated value.

Theoretically, a basic purpose of the holding company is to aid the subsidiaries. The theory is that the assistance will go "downstream." In practice, however, the aid often went from child to parent, particularly in the form of "upstream loans" and excessive dividends. Such practices, common during the heyday of the holding company, came to light when difficulties along the line caused the leverage to go into reverse and to threaten the stability of the pyramid.

The development of sprawling utility systems, held together by holding companies, often covering an unjustifiably large geographical area and extending over many state lines, tended to obstruct the state commissions in their regulation of utility rates and practices. The holding company was often outside the jurisdiction of the states which had control over the operating companies. Operating companies doing business in different states were frequently controlled by a holding company organized in still another jurisdiction. Since holding companies produce no utility services, the typical utility commission had difficulty in acquiring jurisdiction over them.

Frequently an operating company working in one state sold electricity or natural gas wholesale over the state line to a company in another state. This company, in turn, might sell at retail to the local consumers. The regulatory commission of the latter state would have no control over the prices charged at wholesale by the company over the state border, though such rates would, of course, have an important effect upon the prices paid by the final consumer. The widespread holding-company organization which controlled producing and transmission companies in different jurisdictions aggravated this problem of control over state lines. The state could not act since such action would place a direct burden upon interstate commerce. The federal government, which had the constitutional right to regulate interstate commerce, for a long time hesitated to act. There was a "no man's land" in utility regulation.*

* The condition is illustrated by the decision of the Supreme Court of the United States in *State of Missouri* v. *Kansas Natural Gas Company* (1924), 265 U. S. 298. The Kansas Natural Gas Company, whose business was mainly interstate, transported natural gas by continuous pipe lines from wells in Oklahoma and Kansas into Missouri and there sold and delivered it to distribution companies, which then disposed of it to local consumers. The Court held that the rates which the company charged for gas sold to the distributing companies across state lines—it will be noted that the rates at which the com-

3. *Confusion of the investor.* In the midst of all this the investor was naturally confused. The securities which he bought represented often a bad mixture of hope and prophecy. The net income of the issuing corporation might be overstated by various forms of accounting manipulation. Even if real in the beginning, such income was frequently stepped up or transformed by excessive trading on the equity and an uneconomic pyramiding of companies. While this was pleasant to the investor during fair weather, the effect became quite serious when the earnings of the operating companies slowed up and failed to mesh into the high-gear finance.

The investor could not even rely on the name or description of his security. Two companies, for instance, each with first- and second-mortgage bonds outstanding, were combined or consolidated through the holding company and then merged into one company. The old mortgages remained outstanding. The new company then issued new bonds which were secured by the consolidated property. Such bonds, which are junior to the prior mortgages, were the first issued after the consolidation and hence were frequently called "first consolidated mortgage bonds." The parsing of this expres-

pany sold to the local final consumers were not involved—were not subject to reglation by the Public Utilities Commission of Missouri. The business of piping natural gas from one state to another and selling it, not to consumers but to independent distributing companies which sell it locally to the consumers, is interstate commerce, said the Court, and is free from direct state interference. If any jurisdiction is to regulate such interstate commerce, it is the United States Congress.

Three years later (1927), still at a time when the holding company dominated the field, the Court denied the right to Rhode Island to regulate the wholesale electric rates paid by a Massachusetts company to a Rhode Island company. The Court said: "[The interstate business carried on between the companies] is not local to either state, but is essentially national in character. The rate is, therefore, not subject to regulation by either of the two states in the guise of protection to their respective local interests; but, if such regulation is required it can only be attained by the exercise of the power vested in Congress." *Public Utilities Commission of Rhode Island* v. *Attleboro Steam and Electric Company* (1927), 273 U. S. 83, at p. 90.

The situation in utility control in the 1920's and early 1930's was closely similar to that existing in railroad regulation after the United States Supreme Court had held in *Wabash, St. Louis and Pacific Railway Company* v. *Illinois* (1886), 118 U. S. 557, that the states had no power to regulate commerce among the states, such power resting exclusively in Congress. The next year (1887) Congress passed an act to regulate railroads engaged in interstate commerce. This act, though at first weakly enforced and narrowly and unsympathetically construed by the courts, was ultimately expanded and interpreted in such a way as to deprive the states of virtually all control over even intrastate rail transportation.

sion indicates, of course, that the "first" modifies "consolidated," not "mortgage." But investors do not always parse before they buy.

When the investor bought a "bond" issued by a holding company, he did not always realize that it really represented, as we have already mentioned, only a subordinate claim on the basic assets and earnings, namely those of the operating companies. The purchaser of such bond did obtain a diversification which he might not otherwise have received, but he often paid a penalty for it in being so far removed from the fundamental value. The investor who fared the best was often the one who had purchased securities issued by an operating company. He was close to the ground and near the ultimate value.

Remedial legislation. All of these evils have been attacked by legislation. The Federal Public Utility Holding Company Act of 1935 requires utility holding companies, as defined in the Act,* to register with the Securities and Exchange Commission, giving pertinent facts in regard to their financial affairs. Under the "death sentence" in Section 11, the Commission may require any holding-company system sprawling over too wide a territory to contract into a unified and physically interconnected system confined to a single, effectively sized area. This section also provides that there may be a maximum of three tiers or layers of companies. This means that any holding company above the second degree is not to be permitted. Thus, an operating company ("son") may be controlled by a holding company of the first degree ("father") which may again be controlled by a holding company of the second degree ("grandfather"). But there may be no "great-grandfather." † Much progress has been made in the unscrambling of the holding-company systems, but the job is far from completed. ‡

Service charges, which are closely regulated by the Act, may cover only the costs. Upstream loans are forbidden. A uniform ac-

* A holding company is defined by the Act as any corporation holding 10 percent or more of the voting stock of, or exercising a controlling influence over, an electric or gas company. It is possible also that an unincorporated individual owning substantial quantities of stock in a utility may be considered a holding company by the law.

† Another way of stating this point is that no holding company may hold stock in a holding company which in turn holds stock in another holding company.

‡ See Appendix N for account of Insull holding organizations and also for the breakup or integration of the Lone Star system, the first holding company to meet the requirements of the Public Utility Holding Company Act of 1935.

counting system is prescribed for registered holding companies. Intercompany transactions are to be closely watched and in some cases they are prohibited. The Commission regulates securities transactions of both holding and operating companies. The acquisition of securities and utility assets by holding companies is closely regulated under this law by the Securities and Exchange Commission. In correlation with this act many state legislatures and commissions are scrutinizing the boosting of expenses and the inflation of the rate base.

Not only did the Federal Public Utility Holding Company Act give to the Securities and Exchange Commission various control measures over holding-company finances, but it also gave the Federal Power Commission the authority to regulate one of the "no man's lands" already referred to, namely the rates, services, and finances of electric companies engaged in interstate commerce or whose transactions cross state lines. A later (1938) act gives a somewhat similar control over the wholesale rates for natural gas moving in interstate commerce.

There is apparently no intention in these acts to have the federal power encroach upon that of the states, as happened in railroads. Provision is made for close cooperation between the Federal Power Commission and any state commission concerned. Joint boards of federal and state commissioners may be set up under the Act of 1935. The Federal Power Commission may confer with the state commissions in regard to various matters in which both jurisdictions have an interest, and the Federal Power Commission is required to make available to the appropriate state commission any information it has gathered which may be of assistance and value to the state in carrying out its control over intrastate electric and natural gas companies.

The government corporation. Government itself is frequently in the position of a holding company. States and municipalities have organized separate establishments, sometimes schools and utility companies, for the purpose, for instance, of avoiding constitutional debt limitations. The most familiar widespread development of the "government corporation," however, has come in the activities of the federal government. Some of these corporations have been established by a direct act of Congress, such as the Tennessee Valley Authority, the Federal Deposit Insurance Corporation, and the Reconstruction Finance Corporation, while others have been created by one of the agencies already established, as illustrated by the incorporation of

the Metals Reserve Corporation and the Defense Plants Corporation as subsidiaries of the Reconstruction Finance Corporation. A federal corporation has been organized even under the state laws. "Pyramiding" is possible. The Metals Reserve Corporation, for instance, formed its own subsidiaries. So many of these corporations have been created virtually independent of Congress and with such large powers that they have been called a "fourth branch of government." It has been estimated that the assets of these corporations in 1943 amounted to $23,000,000,000.*

The reasons for the use of the corporate device for the various agencies have been summarized as follows:

> (1) To eliminate annual appropriations and to allow profitable years of operation to be balanced with loss years; (2) to permit the shifting of funds from one project to another in case of miscalculations as to the cost of certain projects; (3) to provide for unforeseen emergencies; (4) to enable the securing of additional funds by borrowing in case of extraordinary emergencies; (5) to eliminate the supervision of the Comptroller General and accounting methods not sufficiently flexible for business operations; and (6) to make contractual relations with private interests easier.†

John T. Flynn summarizes a potent argument against the government corporation, uncontrolled and unaccountable as it was until Congress passed appropriate legislation, in the following words:

> When this battery of "corporations" went into action it would take a Philadelphia lawyer to follow their devious trails. Behold them: The United States Treasury would borrow money from the people. The RFC would then borrow it from the Treasury. The BEW [Board of Economic Warfare], which is not a corporation but operates as one, would borrow it from the RFC. The Metals Reserve would get it from the RFC through the BEW and the Colonial Mica (subsidiary of Metals Reserve) would get it through the Metals Reserve. Samuel Insull in his bravest days never did a better job than this.‡

Some progress has been made toward bringing this "fourth branch of government" under the control of Congress. The Government Corporation Control Act of 1945 subjected most of these corpora-

* Kenneth L. Pray, "Financial Status of Federal Corporations," *Harvard Business Review,* Vol. XXV (Winter 1947), p. 158.

† *Ibid.,* p. 159.

‡ John T. Flynn, "Government Corporations Should Be Wiped Out," in *Readers Digest,* August 1945, pp. 42-43.

tions to the policies and requirements of the Budget Bureau and the General Accounting Office. Public opinion seems to have been awakened, and further developments in the solution of this problem will depend upon the facts which constant investigations are still disclosing.*

Summary. Though a few holding companies had been organized by special act of the legislature, the impetus to the use of this form of organization was given by the New Jersey Law of 1888. The merger has had certain advantages over the holding company in the matter of compactness and in the fact that, constituting an acquisition of the assets of the merged company, it has often escaped liability as a violation of the Clayton Anti-Trust Act, but the holding company has probably been more frequently used than the outright merger as a device for accomplishing combination.

The advantages to the promoter and to the active combining corporation of the holding company may be summarized under four heads:

1. Personal considerations, involving, for instance, the ability to save the face of old officers by keeping them in their nominal positions.

2. Political expediency, as illustrated by the subsidiary companies in different sections and areas appealing to local or state interest and pride.

3. Ease of arrangement, emphasized by the fact that, to consummate a merger, the promoters must get their hands on 100 percent of the stock, while in the case of the holding company they need acquire only a safe controlling interest.

4. Possibility of financial manipulation, in that promoters by the holding company device have been able to control a very large investment with a relatively small outlay of funds.

The holding company is a legitimate and valuable form of combination, but certain evils have become associated with its use. These abuses include excessive manipulation and pyramiding, the circum-

* See Kenneth L. Pray, *op. cit.*, and an earlier article by Charles C. Abbott, "Federal Corporations and Corporate Agencies" in *Harvard Business Review*, Vol. XVI (Summer 1938), p. 436. Mr. Pray is executive director of the Citizens National Committee, Inc., an organization which has made an elaborate study of the problem of the government corporation. The Corporation Supplement to the United States Budget, presented by President Truman for the fiscal year 1947, gives numerous statistics, which are probably as yet incomplete but are the best available, for all wholly owned government corporations. Many of these facts are cited in Mr. Pray's article.

vention of public-utility regulation, a tendency toward excessive stock watering, and the confusion of the investor.

All of these evils have been directly or indirectly attacked by legislation. The most important law is the Federal Public Utility Holding Act of 1935, the most popularized feature of which is the "death sentence" but which has other important provisions, such as the regulation of service charges, the forbidding of upstream loans, and the scrutinizing by the Securities and Exchange Commission of the issuance of new securities under the provisions of the Act. The Act also gave the Federal Power Commission power to regulate the rates and services and to some extent the finances of electric companies which are engaged in interstate commerce or whose transactions cross state lines. State public utility laws have also been broadened.

The United States government has also resorted to the holding-company device. Some of the federal corporations control other such organizations in good, private holding-company fashion. There has even been pyramiding. The Corporation Control Act of 1945 subjected most of these federal corporations to the requirements and regulations of the Budget Bureau and to the rules and procedure of the General Accounting Office.

PROBLEMS

1. "Because of debt limitations some taxing districts have organized holding companies to build schools." News item.

How might holding companies accomplish their purpose in this respect?

2. Companies and properties may pass from the jurisdiction of the Securities Exchange Commission as soon as they meet the requirements of the Public Utility Holding Company Act as interpreted and enforced by the Commission. By 1946 about $8,000,000,000 of assets had been divested under Section 11, of which about $5,500,000,000 became no longer subject to the Holding Company Act. More than $4,000,000,000 of electric utility properties alone have passed from the jurisdiction of the Securities Exchange Commission.

a. What are the tests as to whether the control passes from the Securities and Exchange Commission?

b. Where does the control go?

c. Do you see any particular problem involved in such transfer of control?

3. Analyze the proceedings in regard to the Lone Star System (Appendix N) under the following heads:

a. The reason for the proceedings.
b. The process of divestment.
c. How the proceedings simplified the structure of the organization?

4. Many holding companies faced integration and simplification proceedings under the Public Utility Holding Company Act of 1935. The Standard Power and Light Corp. and Standard Gas and Electric Co. group had control over widely scattered properties in all sections of the United States except the extreme South and the Northeast. The North American Company, in contrast, controlled operations only in California, Ohio, District of Columbia, Wisconsin, Missouri, Michigan, Illinois, Iowa.

a. Which of these groups do you suppose was treated the most drastically in the proceedings brought under the Act by the Securities and Exchange Commission?
b. Consult the *Tenth Annual Report* of the Securities and Exchange Commission, for a summary of what was done up to June 30, 1944, and later reports for subsequent developments. Also consult *Moody's Manual for Public Utilities* under the names of these companies.

5. Byllesby Engineering and Management Corporation was a wholly owned subsidiary of Standard Gas and Electric Company. If Standard Gas and Electric wished to acquire control of a certain company, it had the Byllesby organization acquire the stock of such company. Byllesby then transferred this stock to Standard, receiving in exchange the cost plus an additional amount as profit—a "substantial gain" some of the financial papers called it. Byllesby then rendered management services to the subsidiary companies, charging up to 4.5 percent of gross revenues, the charges averaging about 1.75 percent.

a. In what other ways did holding companies acquire control over subsidiaries?
b. As already noted, the service company here was a subsidiary

of the holding company. What other shape might such service organization take?

c. How would the practices of Standard and Byllesby fare under the Public Utility Holding Company Act of 1935?

(Note that the Byllesby organization is referred to in *Taylor* v. *Standard Gas and Electric Company,* in Appendix O.)

Chapter 30

Without Benefit of Charter

As we come to the end of our study we will have concluded that the individual businessman, the entrepreneur, has almost disappeared in some economic areas before the rising domination by the corporation. Let us summarize some of the important facts and trends.

1. The corporation has become responsible for the major portion of our economic activity. In manufacturing, for instance, 24 percent of the establishments in 1904 were corporations, turning out 74 percent of the total value. By 1939, corporations owned 52 percent of the manufacturing enterprises, and their share of the total output had increased to 92 percent.

Corporations conduct about nine tenths of our transportation service and they carry on all the activity in commercial communication and in the production and distribution of light, power, and gas. About 96 percent of our mining is corporation controlled, and even in the service industries at least 30 percent of the activity is performed by the corporation. The corporation carries on at least two thirds of all business. Agriculture is the only industry still largely conducted by individuals in their individual capacity, only about 7 percent of the total product in this field being contributed by the corporation.

2. Business has become highly concentrated among relatively few corporations. In 1942, according to the *Statistics of Income,* compiled by the Bureau of Internal Revenue, profit-earning corporations in the United States had total net income of $24,052,000,000 before the various federal income, excess-profits, and capital-stock taxes. This income was reported in 269,942 corporate returns, but the 3033 corporations earning $1,000,000 or more—only 1.1 percent of all the corporations—earned 69 percent of the $24,052,000,000. Three hundred and thirty-four corporations earning a net of $10,000,000 or more—slightly in excess of 0.1 percent of the total num-

ber—accounted for an income of $9,494,000,000, or about 39 percent of that of all the profit-making corporations.

3. The assets of the corporations were also highly concentrated. Four hundred and fifty-five corporations submitting balance sheets with assets of $100,000,000 or more owned property valued in 1942 at $183,889,000,000, comprising some 51 percent of all corporate assets. These 455 returns, from both income and no-income corporations, showed $8,482,000,000 of net profits, or almost one third of the total for all corporations reporting balance sheets. This small group of companies paid federal profits and income taxes of $3,621,000,000 out of a total of $12,138,000,000 for all corporations, and they distributed cash and property dividends of $2,431,000,000, or about 43 percent of the total. In 1945 our billion-dollar corporations —numbering 44 and including the mutual insurance companies— owned about $100,000,000,000 of assets or more than one fourth of the total assets of all corporations. The seventeen two-billion-dollar companies had corporate assets of $65,000,000,000, or about one sixth of all corporate assets.

Some of our corporations own even more property than the total assessed valuation in some of our states. Only ten states in 1937 had property within their borders in excess of the assets of either the Metropolitan Life Insurance Company or American Telephone and Telegraph Company. To put the point in a different way, each of these two corporations had a greater amount of assets than the assessed valuation of each of thirty-eight states. The Prudential Life Insurance Company owned assets approximately equal to the assessed valuation of the state of Texas. Each of twenty-five corporations had assets exceeding the assessed valuation in Colorado.

4. The ownership of the stock of most of the corporations has become highly concentrated. Though the 200 largest nonfinancial corporations in the United States in 1937 had eight to nine million stockholders or stock-holding accounts, fewer than 75,000 persons, or less than 1 percent of the total, received one half of all dividends, and 10,000 received about 25 percent of the dividends.* Moreover,

* The data for these summary paragraphs have been obtained from five sources: (1) *Sixteenth Census of Manufactures,* (2) *Statistics of Income of* 1942, published by the Bureau of Internal Revenue of the Treasury Department, (3) Temporary National Economic Committee *Monograph No.* 29 on "The Distribution of Ownership of the Largest 200 Nonfinancial Corporations, 1940, (4) *Hearings* of the Temporary National Economic Committee, especially Part I, "Economic Prologue," pp. 81-116, and the "Final Report and Recommendations," pp. 675-80, (5) Table 13, Billion Dollar Corporations in America, in *Trends in American Progress,* Investors Syndicate, Minneapolis, 1946.

many of the large corporations hold substantial interests in the stock and bonds of other large companies.

5. Even many of these large stockholders have little to do with the financial policy of their corporations. The typical large, widely held company is controlled by a small inner group, whose members own very little of the voting stock. Though the proxy holders formally elect the directors, those so selected often "do not direct." The management may be in the hands of professional managers.

6. The fact that the ownership of the large, widely held corporation is often divorced from the management gives rise to a process of involuntary saving through the retention of earnings. This process is involuntary because the stockholders have little to say as to the amount of dividends paid. The investment of these retained earnings adds to the tremendous scope of influence of the managements of our large corporations and, in turn, detracts from the prerogatives of the ultimate furnishers of the funds.

Popular view of a corporation. What is this corporation which we have studied? It has been called everything from a Frankenstein * to, in the words of the late Nicholas Murray Butler, the "greatest single discovery of modern times." Many consider the corporation as an invisible, intangible monster made by men but separate from men, a financial almighty riding high in the sky, scheming to bring misery on mankind. This seems to be the view held by the tenant in John Steinbeck's *The Grapes of Wrath*.† The driver of the tractor, we read, was about to plow down the house of the tenant. The tenant protested:

"You bump it down—I'll be in the window with a rifle. . . . I'll pot you like a rabbit."

"It's not me" [answered the driver] . . . and look—suppose you kill me. They'll just hang you, but long before you're hung there'll be another guy on the tractor, and he'll bump the house down. You're not killing the right guy."

"That's so," the tenant said. "Who gave you orders? I'll go after him. He's the one to kill."

"You're wrong. He got his orders from the bank. The bank told him, 'Clear those people out or it's your job.' "

"Well, there's a president of the bank. There's a board of directors. I'll fill up the magazine of the rifle and go into the bank."

* I. Maurice Wormser, *Frankenstein Incorporated,* McGraw-Hill Book Co., 1931.

† John Steinbeck, *The Grapes of Wrath,* Viking Press, 1939, pp. 51-52.

The driver said, "Fellow was telling me the bank gets orders from the East. . . ."

"But where does it stop? Who can we shoot? I don't aim to starve to death before I kill the man that's starving me."

"I don't know. Maybe there's nobody to shoot. Maybe the thing isn't men at all. Maybe, like you said, the property's doing it. Anyway I told you my orders."

"I got to figure," the tenant said. "We all got to figure. There's some way to stop this. It's not like lightning or earthquakes. We've got a bad thing made by man and by God that's something we can change."

Economic versus legal concept. Though numerous minute distinctions are possible, there are basically two opposite views as to the nature of the corporation: the legal or judicial and the economic or individualistic. The judicial or legal view is formidable and metaphysical. Chief Justice John Marshall in 1819 * defined a corporation as an "artificial being, invisible, intangible, and existing only in contemplation of law." The famous chief justice adapted his definition from that of Lord Coke given more than two centuries before. Coke had taken his cue from Queen Elizabeth, who was eager for the profits from the sale of charters, and from James I, who had insisted that the Crown be recognized as possessing the sole power to charter corporations. Modern jurists have followed Coke and Marshall and have continued to emphasize that the corporation is an artificial being in the eyes of the law and that it exists only by the consent of the sovereign authority.†

* *The Trustees of Dartmouth College* v. *Woodward* (1819), 4 Wheat. 518 at 636.

† In several treatises and in arguments and decisions while he was attorney general and lord chief justice, Coke accomplished the intrenchment of the doctrine that corporate existence must come from sovereign authority. The Stuarts, beginning with James I, used this doctrine as a wedge to get complete authority over the corporations of the day. In the case of *Sutton's Hospital* (1612), 10 Rep. 22b, the court stated that the existence of a corporation can come only by the act of the king himself (corporation sole), by authority of Parliament, by the king's charter, and by prescription. (Corporations that had long been in existence and which could not come under the rule that a grant should be by authority of the law were said to be legalized "by prescription.") Samuel Williston, "History of the Law of Corporations before 1800," *Harvard Law Review,* Vol. 2 (1888), pp. 105-24, at 114.

Coke's views as to the origin of the corporation have been greatly criticized on the ground that numerous corporations both in Roman and English law had long existed without any form of franchise, express or implied, from the legal authorities. See, for instance, Adolf A. Berle, Jr., *Studies in the Law of Corporation Finance,* Callaghan and Company (1928), pp. 4-11. Many of the ancient guilds, as well as those of the Middle Ages, appear to have been in

At the other extreme from the concept of the corporation as a legal entity created or sanctioned by the sovereign is the economic idea that it is merely an association of individuals acting collectively with the consent of the state. Businessmen enter into this arrangement so as to obtain a continuity of existence, to protect themselves from unlimited liability, to segregate the assets for specific purposes, to permit a free transfer of shares, and to obtain a reasonable division of labor in the matter of management. According to this economic or individualistic view, there is nothing metaphysical or intangible about the corporation; it is essentially a devise through which income is channeled for the purpose of distribution, either now or later, to the members.

These two theories or concepts of the corporation are often mixed indiscriminately in our thinking with two unfortunate results: (1) Inconsistencies and confusion have grown up in our social policy in regard to the corporation; (2) The corporate entity is used by unscrupulous individuals to accomplish subterfuge and deceit.

1. Inconsistencies and confusion in our social policy. Consider, for instance, the subject of taxation. Tip-Top, Incorporated, has a net income of $10,000. It has outstanding 1000 shares of stock, all of which are owned by one stockholder or by one stock-holding family. Such "one-man corporation" represents a common situation. All United, Incorporated, at the other extreme, has a net income of $10,000,000. Its 1,000,000 outstanding shares are owned by 50,000 shareholders. Its stock is owned by a relatively few large capitalists at one extreme and by thousands of small holders at the other. It may be controlled by a professional management acting perhaps with advice from several of the large holders. This also represents a fairly typical condition.

Taxation of corporations. The government now levies a tax on the net income of these corporations, let us say, a proportional tax

effect corporations. The collegium of the Romans, used by educational, military, and religious groups as well as occasionally for business purposes, owned property, possessed continuity, had an entity or existence separate from the members, and carried on free from unlimited liability for its members. For centuries collegia appear to have existed without any specific license from, or recognition by, the state. It was only when they began to engage in political activities that the state took notice of them and required its sanction for their existence.

The corporation had been considered a legal entity long before the time of Coke. But the prestige given to the theory by this rugged and opinionated jurist, who became an institution in the England of his day, served to crystallize it in the minds of men.

of 10 percent. Tip-Top pays $1000, leaving $9000 for the one-man proprietor, who, of course, will also be taxed on his dividends as individual income. All United will pay $1,000,000, and its balance will be $9,000,000. A holder of 5 shares of All United would now receive $45 compared with $50 before the tax, if all the earnings are distributed. Similarly, the holder of 1000 shares would receive $9000 instead of $10,000.

Now let us assume, instead, that the government imposes a high progressive income tax with an exemption of $10,000. Tip-Top will then be exempt, though there is only one stockholder—a rather large one—while All United will pay a high tax, conceivably, let us say, a total of $3,000,000.* This levy reduces the income available for our holder of 5 shares from $50, before any tax, to $35, and that available to the holder of 1000 shares from $10,000 to $7000. The same law, however, as we just mentioned, will leave the owner of the 1000 shares of Tip-Top entirely free from this corporate tax.

We know that often one man may own a large proportion of the stock in a small corporation, while another has a few shares in a large corporation; that one man with a large total income may receive only a small percent from dividends, while another with a small income gets a comparatively large proportion from dividends; that corporate dividends may constitute the main or only source of one man's livelihood, while the same amount of dividends is only a small fraction of the total income of another stockholder.

From these illustrations it will be seen that a progressive corporation income tax can violate a fundamental principle of taxation —namely, equality of treatment of people in the same income class. The proportional corporation income tax may even be really regressive—that is, it may fall more heavily upon the little fellow than upon the large-income recipient. Though there are some who propose that such corporation income taxation be eliminated, most of the proposals have to do with the alleviation of the points of hardship or unfairness. We can here mention only a few of the numerous suggestions.

Some authorities argue that the income of a corporation is basically the income of the individual stockholders and that such income should, therefore, be taxable to the stockholders rather than to the corporation, whether actually paid out or not. This would mean treating the profits of a corporation in the same way as the

* No attempt is made in our illustration to apply the corporation income tax rates in effect at any specific time.

income of a partnership, as taxable to the members as their individual income whether they are drawn out or left in the business.

Other tax experts advocate the return to the system in effect in the United States prior to 1936 whereby, when a corporation's income was taxed, any dividends received by the stockholder were exempt from his normal individual income tax, though they were subject to the individual surtax. If there are no normal and surtax rates, or if the distinction between them is insignificant, a practicable and rough method of accomplishing this concession would be to allow the taxpayer a reduction of a specified minimum percentage, such as that in the lowest income bracket, on any dividends he has received. Some students point to the advantages of the British system of taxation under which the income tax paid by the corporation is regarded as a withholding of the tax of the individual stockholder.

One of the most seriously considered proposals is that there be only a small tax (or none at all) on the net income of a corporation, and that there be a heavy tax on the undistributed earnings above a certain minimum exemption. Related to this is the proposal that after the corporation's accumulated surplus has reached a certain figure, the rest of the income must be paid out either in cash or in stock dividends fully taxable at par as income to the shareholder. Many authorities also maintain that the corporation income tax should be proportional rather than progressive.* Finally, there is the proposal that the federal income tax be amended to permit a corporation to consider cash dividends paid as a deduction when computing its taxable income, in the same way as it now deducts bond

* In the Pabst Post-War Employment Contest of 1944, several winners gave attention to the problem of corporate income taxation. The seventeen winning essays were published in booklet form by the Pabst Brewing Company, Milwaukee, 1944. Among the tax revision proposals affecting corporations were:

1. Elimination of the excess profits tax on corporations (suggested by four of the seventeen winners). This was eliminated in 1945.
2. Reduction or elimination of the corporate income tax (suggested by four).
3. Exemption from business taxes of *distributed* business earnings if dividends are taxed as recipients' income (suggested by six).
4. Exemption of, or reduced rates for, retained business earnings or portions of individual incomes that are promptly reinvested (suggested by three).
5. Imposition of a special tax on idle money or on unused business earnings (suggested by seven).

These summary statements are selected from the review of "Seventeen Post-War Plans—The Pabst Post-War Employment Awards" by Emile Benoit-Smullyan in *American Economic Review,* Vol. XXXV (March 1945), p. 122.

interest. This proposal would subject the corporation to what would really be a tax on the undistributed profits.

No attempt can be made here to appraise the desirability or the practicability of these suggestions. The basic argument for making adjustments so as to eliminate or attempt to reduce the double taxation of corporate income is that the corporation is simply a device for cooperative action by a group of individuals and, as such, possesses no taxpaying ability.

On the other side, it is urged that the corporation has certain privileges, the exercise of which may give it special ability to earn an income and therefore to pay taxes. It is pointed out, for instance, that corporations have recently been earning large profits even after allowance was made for income and excess profits taxes. Why, then, should they not pay taxes on their income?

A study of the figures on "Net Profits Earned and Dividends Paid by Various Groups of Companies" (Appendix I) will reveal the high and even rising trend of the absolute amounts of corporation profits. In the accompanying table, we note that the percentage

PROFITS AFTER TAXES AS PERCENTAGE OF NET WORTH, 1940 AND 1946 *

Size of concern	Durable goods manufacturing	Nondurable goods manufacturing	Wholesale trade	Retail trade
Small †				
1940	8	6	9	9
1946	15	20	26	26
Medium †				
1940	10	8	7	7
1946	13	19	20	21
Large †				
1940	10	8	7	8
1946	8	13	20	19

* Source: Albert R. Koch and Charle H. Schmidt, "Financial Position of Manufacturing and Trade in Relation to Size and Profitability, 1946," *Federal Reserve Bulletin*, September 1947, p. 1095. Net worth is sum of capital stock and surplus as of end of year.

† In this study a small business in manufacturing is defined as one with assets under $1,000,000, a medium size, $1,000,000 to $10,000,000, and a large size, $10,000,000 and over. In trade, the figures are respectively $250,000, $250,000 to $1,000,000, $1,000,000 and over.

of return to net worth for a sample group of over 2600 corporations was also generally greater in 1946 than in 1940. The greatest percentage rise was among the small corporations, although large and medium-sized companies also experienced substantial increases, except the large-size durable goods companies.

The point is often made that the nonincorporated business enterprise, such as the farmer, has also enjoyed an increase in the return on its investment. How can we justify the double taxation of corporations in the light of this fact? Why should incorporated business be treated differently from the nonincorporated? *

Since fixed assets are likely to be valued at cost and since the annual depreciation allowance is generally a specified percentage of such cost, a time of rising prices could bring about an understatement of expenses and a resulting overstatement of profits. This may be true especially if the fixed assets are not quickly or easily replaceable.

As we have already seen, arguments for easing corporate income taxes are tempered by the fact that in most cases the shares of our large widely held corporations are held by comparatively large stockholders. A study for the Temporary National Economic Committee, *Survey of Shareholding in 1710 Corporations with Securities Listed on a National Securities Exchange,* Monograph No. 30 (1940), reveals that during 1937-39 six sevenths of the common-stock holdings of 1572 corporations listed on a national exchange were for 100 shares or less, but that the shares held by these holders totaled only one sixth of those outstanding and only one fifth of the aggregate value. In Monograph No. 29, *On the Distribution of Ownership of the 200 Largest Non-financial Corporations* (1940), it was pointed out that the largest one tenth of the shareholdings of our 200 top nonfinancial corporations accounted for four fifths of the total value.

The small investor does, however, tend to buy stock in the large company. He knows little about the "one-man corporation" and other closely held companies. He probably could not buy into them, if he wanted to. The owners of 100 shares or less of the common

* The accountant recognizes that accounts are often subject to certain circumstances which may fundamentally affect the accuracy of the profit figure. For instance, in a time of rapidly rising material prices, a large inventory on hand at the end of a period will tend to exaggerate the profits, especially under the first-in-first-out system. Such additional profits may be canceled out by subsequent losses when raw material costs fall. On the other hand, of course, companies may keep profits down to some extent by creating various new reserve accounts or by increasing the allowances for the usual valuation reserves.

stock of corporations with assets under $1,000,000 (in the group of 1572) held 3.5 percent of the total number of shares, or 13 percent of the total value. In the case of those corporations having assets above $200,000,000, the holders of less than 100 shares held 19 percent of the shares, or 23 percent of the value. In the 200 largest nonfinancial corporations, on the other hand, the degree of concentration in stock ownership seemed to be higher among the very large corporations than among those of more moderate size.

Though the large investor is hardest hit by the progressive corporate income tax, it is equally true that the small stockholder (and there are many) in the high-income corporations is also adversely affected. The advocates of high corporate taxes contend, however, that it is necessary to consider the general situation, and that perhaps it would be better socially if these small holders had confined their paper investments to the bonds of government and private companies, to insurance and annuity policies, and to bank deposits. Moreover, the top argument for the corporation income tax is the fact that the government needs the money and the corporation is a good place to get it with the minimum of trouble. Corporations are on the political defensive at the present time.

2. **The corporate entity and subterfuge.** We have already seen that from the business point of view a corporation is essentially an association of individuals. The legal fiction of the separate entity of the corporation has been so overemphasized, however, as to raise a point of danger. Corporate managements have often resorted to the fiction as a way of accomplishing things which were not the intention of the law. Perhaps Steinbeck's tenant had a point when he meditated: "There's some way to stop this. It's not like lightning or earthquakes. We've got a bad thing made by man and by God that's something we can change."

The late Justice Oliver Wendell Holmes once said that the corporation serves to "interpose a non-conductor through which, in matters of contract, it is impossible to see the men behind." * This screen is entirely legal and proper. One basic purpose of the corporation is to separate the business from its members. When the law created the fiction of the legal entity, however, it did so on the assumption that it be used only for socially justifiable purposes. Businessmen have sometimes forgotten this principle and have used the screen or curtain in an illegitimate manner. But the courts point

* *Donnell* v. *Herring-Hall-Marvin Safe and Lock Co.* (1908), 208 U. S. 267, at p. 273.

out that what the law gives the law may, on proper occasion, take away. The courts have frequently punctured the corporate veil, exposing the real actors to the light of day. Corporate managements have sometimes found themselves without benefit of charter.

Use of corporate device to reduce tax liability. Some of the worst abuse of the corporate entity has come in efforts to avoid and to reduce individual income taxes. The most sensational, though not of the greatest social significance, was the "incorporated yacht." The costs of operating a pleasure yacht or of pursuing any hobby or diversion are personal and are, therefore, not deductible under the individual federal income tax law. Ingenious lawyers, however, thought up a scheme: Why not have the owner of the yacht incorporate a "one-man" or a family company; then have the yacht owner "sell" his yacht valued at, say, $100,000, to this company? If the expenses of operating the yacht are $20,000, the owner could also turn over to his corporation enough securities to yield an income of $20,000. Let us say that $200,000 worth would be required for this purpose. The company, in "payment" for these assets, issues its common stock to the incorporator. The expenses of operating this yacht then become "business expenses" to the corporation.

The financial statements of our corporation might then run about as follows:

BALANCE SHEET

Yacht . . .	$100,000	Common stock (issued to the incorporator and his family)	$300,000
Securities	200,000		

INCOME STATEMENT

Income from securities	$20,000	
Total income		$20,000
Expenses of operating yacht	20,000	
Total expenses		20,000
Net income		nil

Thus, in our illustration, this corporation can do what a natural person cannot do. It has turned personal expenses into business expenses. The tax on the income from the securities has in effect been avoided. Similar schemes were used in other fields. A wealthy

woman gave her husband an allowance, for which, of course, she was permitted no deduction under the federal income tax law. She then incorporated a farm which she owned and threw in her husband as "manager" at a salary of $36,000. This salary was to be deducted by the corporation as a business expense.* The "salary" of the husband, of course, became taxable income, but it went into a lower tax bracket than that of the wife.

Many additional loopholes were developed to avoid the federal income tax. Individuals who owned good securities which for some temporary reason had fallen in value would sometimes "sell" the securities to companies which they organized and dominated. This sale, they figured, would establish a tax loss which would be deductible from their income. Moreover, when the corporate income tax rates were low compared with the rates on individual incomes, many owners of bonds, stocks, and mortgage notes organized corporations to which they transferred these securities, receiving in return the stock of the new company. This new corporation would then receive the income from these securities and would withhold most of it rather than distribute it to the stockholders. Though such income was taxable to the corporation, it was not taxable to the stockholder so long as it remained undistributed. Such personal holding company was dubbed the "incorporated pocketbook." †

The "personal service corporation" was developed for the same purpose as the incorporated pocketbook. An engineer, or artist, or some other person rendering high-class personal service organized a corporation with his skill as the chief asset and himself as the dominant stockholder. This corporation would then sell services to its clients at the market rate, but the stockholder would "sell" his services to the corporation at a low rate, thus building up the net income of the corporation and minimizing his own individual income. The amount received by the stockholder for his services

* See Randolph Paul, "The Background of the Revenue Act of 1937," *University of Chicago Law Review,* Vol. 5 (1937), pp. 40-88 at p. 67. See also Harold M. Groves, *Financing Government,* rev. ed., Henry Holt & Co., Inc., 1945, p. 203.

† Personal holding companies were incorporated abroad as well as at home. Professor Harold Groves cites the fact that "two shacks in the Bahama Islands were said to have housed the 'home offices' of over 100 American-owned corporations representing many millions of American capital." Groves, *op. cit.,* p. 203, referring to the *Hearings on Tax Evasion and Avoidance* by Joint Committee on Tax Evasion and Avoidance, 75th Congress, 1st session, 1937, pp. 162-91.

would be taxable to him as individual income, but the "profit" to the corporation would remain largely undistributed.

So frequent was the use of the corporation as a device to reduce income taxes that Congress has spent some time at almost every session in plugging loopholes. In 1934 it amended the revenue law by stipulating that no deductible loss can result from the sale of property by the taxpayer to a corporation in which he owns or controls more than 50 percent of the stock. A later decision by the Supreme Court of the United States, based on facts arising before this amendment by Congress, held that no such deduction could be permitted, on the ground that the basic law is not so much concerned with the technical and legal title as it is with the actual command or control over property or income.*

A few other illustrations of plugging loopholes will suffice for our purpose. Congress levied a special tax on the undistributed income of "incorporated pocketbooks," defining as such personal holding companies any corporation whose stock to the amount of 50 percent or more is held directly or indirectly by not more than five people and of whose income at least 80 percent consists of interest, rent, and dividends. A personal-service corporation was considered under the excess profits tax law as essentially a partnership, with the result that its income was treated as if it were immediately or automatically distributed to the stockholder. Section 102a of the Internal Revenue Code imposes an additional income tax upon any corporation formed or used for the purpose of keeping down the individual income taxes of the stockholders by the improper accumulation of income and surplus. Certainly corporations that are mere shells or subterfuge devices will have a hard time justifying the retention of income. Even substantial going corporations will be asked to justify their policy of surplus accumulation.

Mergers of strong with weak companies for the purpose of averaging a lower net income were tolerated as a method of reducing taxes only where the affiliation is for a business purpose and where the activities of the companies are reasonably similar or related. The legitimate use of the consolidated return for tax purposes by a holding company and its subsidiaries presupposes that the control of the companies was obtained for more than a nominal consideration and with a fair expectation that the companies would be used

* *Higgins* v. *Smith* (1940), 308 U. S. 473.

for profit or reasonable business purposes.* An additional tax of 2 percent of the net income has been imposed upon companies or systems making a consolidated return.

The impression must be avoided, however, that the corporation is the only form of organization that can be used to avoid federal income taxes. Recently many businessmen and farmers have formed partnerships for this purpose. A large farmer with a net income of $25,000, for example, is subject to a high rate of surtax. If this had been a partnership with his son or with his wife, the income of each partner automatically would have been $12,500. This would reduce the surtax rate substantially. The courts have severely scrutinized this practice and have upheld it only if the son or wife is a real partner with independent discretion and with a bona fide and valuable interest in the partnership. One of the next jobs for Congress will undoubtedly be to draw the line between the proper and the improper use of the partnership for this purpose.† The cooperative has also been criticized severely as a tax-dodging device.

Other attempts have been made to use the corporation as a mere tool or instrumentality to do indirectly what cannot be done directly.

* Where a company acquired control over the stock of another company from a related company for $1 immediately before the realization of a substantial loss by the acquired company, the federal Board of Tax Appeals held that no consolidated return could be made for tax purposes. The Board decided against the taxpayer on the ground that "Congress did not intend that the consolidated return privilege be enjoyed in cases where the creation of the affiliation was without business purpose, and that such was the situation in the case at bar, where the stock of the purported affiliate was acquired for a nominal consideration, with no expectation of ever realizing any profit or business advantage from it, or conducting business operations through it. . . ." Maurice Austin, "Observations on Minimizing Excess Profits Taxes," *Journal of Accountancy,* Vol. 77 (March 1944), p. 209.

† Two cases decided by the United States Supreme Court in 1946 dealt severe blows to the use of the family partnership for tax reduction purposes. These were *Commissioner of Internal Revenue* v. *Francis E. Tower,* 327 U. S. 280, and *A. L. Lusthaus* v. *Commissioner of Internal Revenue,* 327 U. S. 293. In the first of these, the court stated in a headnote that "A partnership is created when persons join together their money, goods, labor, or skill for the purpose of carrying on a trade, profession, or business, and when there is a community of interest in the profits or losses." An organization could not be a partnership if it "brought about no change in the economic relations of the husband and his wife to the income in question. She must take part in the operation of the business. The partnership here [Tower Case] was merely a reallocation of the income." In the Lusthaus case the court argued that a wife could acquire no separate interest in the partnership when she turned "back to her husband the $50,000 which he had given her conditional upon her turning it back to him."

Community property, introduced in 1948 in our federal tax laws, permits the income to be split evenly between husband and wife.

Other improper uses of the corporation. The stockholders of a company owning ocean steamers worth millions of dollars organized a very small company with a capital of only $10,000 to operate the vessels under lease. A shipping company, one of whose ships was rammed through the negligence of this operator, was given the right to sue the corporation owning the steamers. The court held that the organization of a lessee company with such hopelessly inadequate capital for a business of this size constituted a mere sham and an effort on the part of the owners to escape liability for damages.* A corporation chartered in one country but dominated by stockholders living in an enemy country may be considered by the chartering state in time of war as an enemy corporation.† The decisive test as to whether the corporation is an enemy lies in the control rather than the place of incorporation. ‡

If the dominant stockholder of a corporation had the corporation issue mortgage bonds to himself in order deliberately to place himself, as holder of these bonds, in a position superior to that of the nonsecured creditors, the law may, if such purpose can be proved, push such mortgagee into a place inferior to that of these other creditors. § A similar conclusion will follow if the dominant stockholder owns ordinary debt obligations which, with intent to manipulate, he attempts to put ahead of preferred stock owned by outsiders. ||

A railroad company forbidden by law to haul for hire articles which it owns cannot evade the law by establishing a subsidiary corporation to hold title to the commodities. This is mere subterfuge, said the United States Supreme Court.¶ The seller of a certain company inserts in the contract of sale a valid agreement with the purchaser not to engage in that business again. The seller then starts a new corporation controlled by him to engage in that line

* *Luckenbach Steamship Co.* v. *W. R. Grace Co.* (Circuit Court of Appeals, 4th District), 267 Fed. 676; writ of certiorari denied (1920) in 254 U. S. 644.

† *Continental Tyre & Rubber Co.* v. *Daimler Co., Ltd.* (1915), 1 K. B. 893.

‡ Clive Parry, "The Trading with the Enemy Act and the Definition of an Enemy," *Modern Law Review*, Vol. 4 (January 1941), p. 165.

§ *Salomon* v. *A. Salomon & Company* (1897—House of Lords), 66 L. J. Ch. 35. The dominant stockholder, however, won this case because his intention to defraud was not proved.

|| *Taylor* v. *Standard Gas and Electric Company* (1939), 306 U. S. 307. See Appendix O.

¶ *United States* v. *Lehigh Valley Railroad Company* (1911), 220 U. S. 257. The same general kind of questions with similar results were involved in *United States* v. *Reading Company* (1920), 253 U. S. 26, and in *United States* v. *Lehigh Valley Railroad Company* (1920), 254 U. S. 255.

of activity. If the buyer can prove that the seller started the new corporation in order to avoid his individual obligations not to engage in that business, the courts will tear aside the corporate veil and consider the act of the new corporation as the act of the stockholder.*

These illustrations † hardly begin to enumerate the conditions under which courts will reach behind the curtain to expose the real actors. The presumption, it should be noted, in any case of this kind is always in favor of the legitimacy of the corporate entity. The corporation is a valuable and accepted form of business organization. The fact that the incorporators start a corporation to escape unlimited personal liability is nothing against the corporation. That is a perfectly valid motive. If, however, the corporation is deliberately set up to defraud creditors, to evade existing legal obligations or burdens, to get around a statute, to enable the stockholders to do indirectly what they cannot do directly, to "protect knavery," the courts will tend to disregard the entity.

If a controlling stockholder regards the corporation simply as his "alter ego," or if a holding company considers its subsidiary merely as an adjunct or division, or if its officers feel free to dip into the cash drawers of the subsidiary without formality, or if it has furnished the subsidiary only a small amount of capital which is clearly inadequate to carry on the subsidiary's announced business, or if it pays the debts and wage bills of the subsidiary as if they were its own, or if the holding-company officers continually refer to the assets of the subsidiary as "our property"—such acts—none of them alone, but several together—may, if someone brings a case, cause the courts to "view with suspicion."

Mere control of the board by the holding company or by the dominant stockholder is not of significance, for that is the normal expected thing. And the courts will not place emphasis upon the fact alone that both the subsidiary and the holding company have the same officers and board. But if the controlling stockholder or the holding company regards the company or subsidiary as a dummy or as a desk-drawer company or as a "mere set of books," or as an agent or instrumentality, the courts may remove the mask. If the basic result of the recognition of the entity will be to perpetrate

* *Kramer* v. *Old* (1896), 25 S.E. 813 (North Carolina).

† For the use of a subsidiary as a way of lending insurance-company funds to the company's own officials, see Part 13 of *Hearings* before Temporary National Economic Committee (1939), beginning at p. 6363.

fraud or to work a serious injustice, the stockholders may be considered a mere association of individuals "without benefit of charter." *

Importance of fictions. There are many fictions in life. "Even a human being is not a legal unit in the nature of things, he is only a legal unit if the law so contemplates him." † One man may be a slave, another may be free. One man may be a citizen, another may not be a citizen. The inquisitors softened their treatment of the apostle Paul when he announced that he was freeborn, a Roman citizen. A citizen is a man, but he is more than a man. In the words of John R. Commons, a mere man with no rights is a slave, but thinking and the law turn him into a citizen. Citizenship acquired by act of the law can sometimes be stripped away, leaving him again a mere man.

In an economic sense the corporation is a group of individuals. But in the legal sense it is more than the mere sum of its members. The entity is only a fiction, the result of social policy. When Prime Minister Balfour in a debate in the House of Commons referred to

* The principle under which courts will pierce the corporate veil in certain conditions is generally called the "instrumentality rule." Treatments of the instrumentality rule will be found in I. Maurice Wormser, *The Disregard of the Corporate Fiction and Allied Corporate Problems,* Baker Voorhis Co., 1927, and *Frankenstein Incorporated,* McGraw-Hill Book Co., 1931, ch. V; Frederick J. Powell, *Parent and Subsidiary Corporations,* Callaghan & Co., 1931; Elvin R. Latty, *Subsidiaries and Affiliated Corporations,* Foundation Press, 1936. Legal annotations will be found on *Weisser* v. *Mursam Shoe Corporation,* 127 Fed. (2d) 344, in 145 *A.L.R.* 467, annotation begins at 475. Earlier annotations are found in 39 *A.L.R.* 1071 and 102 *A.L.R.* 1054. A brief but effective treatment is found in Richard N. Owens, *Business Organization and Combination,* 3d ed., Prentice-Hall, Inc., 1946, pp. 101-11. See also Henry W. Ballantine, *On Corporations,* Callaghan & Company, 1946, Ch. X.

The courts have been careful to uphold and respect the existence of the government corporation as a separate legal entity. Courts have held that such a corporation is a person subject to the general rules of law and possesses no immunity against private suits, such as for damages or for garnishment. These federal corporations are not the government; they are rather the creatures of government. They are, therefore, subject to actions in any proper courts, not necessarily only in the United States Court of Claims with the consent of Congress. The Smithsonian Institution, one of the oldest government corporations, has been in the courts several times even in the absence of explicit authority by Congress. The recent cases involving government corporations are *Sloan Shipyards Corporation* v. *United States Shipping Board Emergency Fleet Corporation* (1922), 258 U. S. 549; *Keifer and Keifer* v. *Reconstruction Finance Corporation* (1939), 306 U. S. 381; and *Federal Housing Administration* v. *Burr* (1940), 309 U. S. 242.

† Edward H. Warren, *Corporate Advantages Without Incorporation,* Baker Voorhis Co., 1929, pp. 841-46.

trade unions as corporations, a member corrected him, saying, "Trade unions are not corporations." Mr. Balfour replied, "I know that, but I am talking English not law." When others consider the corporation as an airtight legal entity and a complete separate organization by itself we could answer that they are speaking law, not English. Many corporations are considered by their members as essentially partnerships. On the other hand, there are associations which for all practical purposes are corporations in their responsibility, scope, and method of control.*

No thinking man would deprive the legitimate, going corporation of the benefit of charter. Without the corporation we would be living in a backward economy. Modern industry requires large investment. The corporation has helped to furnish this investment. Modern industry requires continuity of organization. In a system of private enterprise such continuity can come only through the corporation. Modern business demands the limited liability of the members of an organization. This is effectively achieved only through the corporation. Modern industry requires segregation of resources which can come only through the corporation. Business must have easy transferability of shares and unity in management. These can be furnished only by the corporation.

Change in size and change in control. But the corporation has brought with it serious problems. The most important of these is that of control. In his delightful essay "On Being the Right Size," J. B. S. Haldane points out that every physical being has its "optimum" or "most convenient size" and that for any animal "a large change in size inevitably carries with it a change of form." If an ordinary-sized man were turned into a giant of dimensions ten times as large as normal, his weight would be increased by 1000 times. The 200-pound man might then weigh 100 tons. If his bones and muscles were increased in size and strength only ten times, this giant would probably be unable to control himself. His thigh bones would probably collapse as he attempted to walk. To be able to handle himself, a 100-ton giant would need a much different form and shape than the ordinary-sized man. Mr. Haldane concludes

* In *United Mine Workers of America* v. *Coronado Coal Company* (1922), 259 U. S. 344, the Supreme Court permitted a suit to be brought against a union as an organization in itself rather than against the individual members. How far the Taft-Hartley Law of 1947 goes in giving to a union the characteristics of a corporation remains to be seen.

that these facts decrease our respect for Jack the Giant Killer.* The giants, being in the form and shape of an ordinary man, probably did not furnish very formidable opposition.

These principles may also hold for our social institutions. To refer specifically to the corporation, a great change in its size should probably be accompanied by a change in form and control. The corporation and the law of corporations developed and became important in an era of comparatively small businesses. As successors often to partners, the members of a closely held corporation, like the former partners, were real entrepreneurs and showed a great interest and had an important voice in the control of the company. The corporation has grown spectacularly in size, but it has retained its outward forms of control and operation. The stockholders still meet at regularly announced times and generally have one vote per share, but, as we have seen, the meetings are often perfunctory affairs without significance. The directors assemble regularly, but their sessions also are sometimes meaningless. The regular meetings of stockholders in the widely held corporation, and even sometimes those of directors, may become vestigial appendages of an earlier day. Paid professional managers frequently manage "other people's money." The lines of control and responsibility have not developed with the rest of the body.

Some authorities have gone so far as to advocate a threefold system of corporation law and controls: (1) for the closely held or family organization which is much akin to the partnership; (2) for the large, closely held corporation which, though in some respects really a partnership, has broad social effects on our economy; (3) for the large, widely held corporation whose members are not entrepreneurs but occupy, instead, a rather passive position as mere furnishers of capital.†

Under this system different standards could be set up for each type of corporation. The pre-emptive right is of great importance to the stockholders of the closely held corporation but probably of little significance in the case of one which is widely held. Cumu-

* J. B. S. Haldane, "On Being the Right Size," from *Possible Worlds*, as reprinted in Harlow Shapley, Samuel Rapport, and Helen Wright (eds.), *A Treasury of Science*, Harper & Bros., 1946, pp. 321-25, especially p. 321.

† See Warner Fuller, "The Incorporated Individual: A Study of the One-man Company," in *Harvard Law Review*, Vol. 51 (1938), pp. 1373-1406. Mr. Fuller, who differentiates mainly between the one-man corporation and the widely held organization, points out that the courts are already developing a special type of law for the one-man corporation, or "corporate sport" as he calls it.

lative voting might be of great concern to the members of the closely held company, while for the widely owned corporation, with its control through company-held proxies or through a professional management, the exact formula for voting has little significance. It might even be desirable, in the case of the widely held corporation, to consider the holders of stock in the same position as the owners of the bonds—as mere furnishers of capital with no vote. If this were done, the directors would have to be selected in some other way than through the stockholders' ballots. Perhaps the board would remain largely as it happens to be anyway, a self-perpetuating body. It might then be necessary, however, to place the directors in the positive legal status of trustees.

Our present corporate law and practice make no distinction between the responsibility for operational management and for financial management. In the widely held corporation, these two functions might be split, the professional managers becoming responsible for the operations, subject to the broad overview of the trustees, while a representation from the stockholders might be set up to consult with the trustees on the fixing and administration of financial policies.

Many or probably all of the stockholders of the closely held corporation, whether large or small, receive their livelihood in the capacity of officers; there may, as a matter of fact, be few dividends. In the large, widely held corporation, on the other hand, even the large stockholders probably hold no executive position in the company. This difference would undoubtedly affect the law on the subject for the three types of corporations. In the closely held corporation, whether it be large or small, it may become important to maintain the rights of the minority; * in the widely held company the problem is often one of protecting the majority.

The social problem of the corporation has become mainly one of adjusting its form and control with reality.

Summary. From the economic point of view, the corporation is essentially a device sanctioned by the state to give certain advantages and privileges to individuals acting for specified purposes as a unit. From the legal point of view, the corporation is an entity in itself, composed of men but separate from men, existing only by

* The well-known and frequently cited case of *Dodge* v. *Ford Motor Company* (1919), 204 Michigan 459, 170 N. W. 668, is a case in point. This was an equity suit in which certain minority stockholders successfully petitioned the court to order the distribution of additional cash dividends.

the permission of the state. The entity concept was given official recognition by the opinions of Lord Coke.

The economic view of the corporation is a realistic and practical one; the legal concept is intangible and metaphysical. The indiscriminate mixing of, and the failure to distinguish between, these two views has occasioned much confusion in our social and economic thinking. This has shown up especially in our corporation tax policies. Numerous suggestions have been made to remedy the double taxation of corporation incomes. These range all the way from considering corporate income as of the same nature as partnership income to allowing special credits to stockholders who receive dividends from companies which have paid the corporation income tax.

The fact that the corporation is a separate entity in the contemplation of the law has led to its use for avoiding taxes. Owners of securities have sold them to a corporation which they controlled, in order to establish a deductible loss under the income tax. Groups of individuals organized corporations to manage certain investments or to carry on certain personal service occupations, intending to leave most of the income with the corporation. These devices and many others have been the targets of legislation, Congress having been busy at virtually every session plugging up the loopholes.

Unscrupulous men have used the corporate entity to cover subterfuge. They have used the corporation to create an alter ego, so as to insulate themselves from the consequences of their individual actions and to enable them to do indirectly what they cannot by the law do directly. They have used the corporate device to defraud creditors, to evade existing legal obligations, to circumvent statutes, to perpetrate knavery. To prevent these abuses, the courts have developed the "instrumentality rule," according to which, when the corporate concept is abused too unscrupulously, they will permit the piercing of the corporate veil and the exposing of the real offenders. The corporation is a creature of the state for social purposes. If this device is used against the social welfare, the law may be able to take away what it has given.

The law and financial practices of corporations were established at a time when the corporate units were not as large or as complex as they now are. The form of the corporation has not been changed to correspond with its size. Some of the necessary changes in corporation law and finance will be made in just this respect—the adaptation of the practice and management of corporations to correspond with their size and complexity.

PROBLEMS

1. The *Sixteenth Census of Manufactures* reveals that in 1939 there were 184,230 manufacturing establishments in the United States producing $56,843,000,000 worth of goods. Of the total establishments, 52 percent were corporations but they produced 92 percent of the total product. In 1904, 24 percent of the establishments were corporations, producing about 74 percent of the total product. It has been estimated that the 250 largest corporations in 1939, as well as in 1945, hold about two thirds of the manufacturing capacity in the country.

Some authorities have argued that these figures do not necessarily mean a high degree of concentration. They point out that the stockholders of these companies are numbered in the millions. Moreover, many of the securities, in turn, are held by numerous institutional investors, such as insurance companies, banks, and investment trusts, in which tens of millions of us are interested. What do you think of these arguments?

2. The "Annual Report" of the American Telephone and Telegraph Company for 1947 reveals that the number of stockholders in that year reached an all-time high of 723,374. The average number of shares held was 30, and no stockholder owned as much as one third of 1 percent of the total stock. About 208,000 holders owned 5 or less shares each, while 681,900, or 94 percent of the total, held less than 100 shares each. The holders of more than 100 shares, including institutional investors, numbered 41,500, but they held 45 percent of the total stock. More than one half of the shareholders were women.

In 1946 the stockholders approved a system of employee stock ownership, which was put into effect in 1947. According to this plan, employees, other than officers, having more than six months' service, may purchase shares from the company up to certain limited amounts. The price to be paid is $20 below the market, but not more than $150 nor less than $100.

a. Some authorities maintain that stockownership figures such as these show that the control of the company cannot be centralized. What do you think?

b. Why was it necessary for the stockholders to approve the employee ownership plan?

c. Why does the company not wish to sell its stock to employees at less than $100?

3. Business carried on by corporations is sometimes referred to as "large business." Is not "small business" also carried on by corporations?

4. In which of the following industries would you suppose one half or more of the activity to be carried on by the corporation and in which less than one half: mining, agriculture, electric light and power, services, trade, communication, construction, manufacturing generally, cheese making, broom making, embroidery goods, railroads, agricultural implements.

5. James E. Boyle, in *Barron's,* Sept. 26, 1932, wrote:

> The Dalrymple wheat farm (in North Dakota) of 30,000 acres was started in 1876. Land cost 50¢ an acre. Furrows six miles long and straight as an arrow were plowed. Successful at first, this farm gave way to the family size farms. . . . Corporation farming in wheat has passed entirely out of the picture in North Dakota. The simple reason is, it pays better to farm in some other way.

a. Why does large-scale farming, or corporation farming as it is called here, not pay?
b. We learned in Chapter 16 that the average size of farms increased from 155 acres in 1935 to about 195 in 1945. Does this mean more corporation farming?
c. We saw in Chapter 25 and in Appendix M that holdings of farm land by insurance companies increased greatly during the 1930's. Was this "corporation farming"?

6. Which of these rough tests may be considered as characterizing small business?

a. absentee ownership
b. widespread ownership of the company's securities
c. professional managers
d. stockholders also officers
e. the managers also generally owners
f. the capital supplied by a large group of people
g. stockholders generally close to the operating company properties
h. the pre-emptive right is of real value
i. the proxy often used as a means of control
j. real interest by the members in cumulative voting.

7. James T. Carter classifies the theories and concepts of the corporation (in a Ph.D. thesis at Johns Hopkins, 1919, Ch. III) as follows:

a. The individualistic, according to which the corporation is regarded as an association of individuals whose rights and duties are the rights and duties of the individuals themselves;

b. The juristic, under which a corporation is a distinct person with rights and duties different and separate from those of the individual (held by Savigny);

c. The realistic, by which a corporation is neither fictitious nor artificial, nor is it created by the state; rather it is both real and natural and is recognized but not created by law (held by Gierke);

d. The Anglo-American fiction theory, constituting a compromise between the juristic and the realistic conceptions, under which, while the law will normally consider the corporation as an entity, it may, when necessary, consider it merely as a group of individuals.

How would the above fourfold classification fit into the two-group classification given in the text?

8. R. C. Larcom in *The Delaware Corporation,* Johns Hopkins Press, 1937, pp. 175-76, has tables showing the number of corporations existing and listed on the New York Stock and Curb Exchanges in 1932 that were incorporated in various years and the total of these that were chartered in each of Delaware, New York, and New Jersey. Parts of these tables are herewith combined as follows for industrial corporations:

Date of incorporation	Total corporations existing and listed in 1932 that were incorporated in each period	Number of these incorporated in		
		Delaware	New York	New Jersey
1850-1884...	35	..	4	4
1885-1889...	16	..	3	3
1890-1904...	175	5	20	72
1905-1909...	64	5	14	12
1910-1914...	107	19	32	12
1915-1931...	712	371	104	18

a. Can you see any reason for the trends shown?
b. Why did New Jersey early become the favorite place for incorporation, only later to lose its popularity?
c. Which state then became the favorite? Why?

In this connection read John T. Flynn, "Why Corporations Leave Home," *Atlantic Monthly,* September 1932.

9. The Committee for Economic Development in its report published in 1947 on "Meeting the Special Problems of Small Business" (p. 44) includes among its tax recommendations the following:

> Double taxation of corporate income should be eliminated, not only as a matter of fairness but also to stimulate the flow of funds into equity investment. The present discrimination against corporate profits is a serious deterrent to precisely the kind of financing that is most needed by small business—equity financing from internal or external sources.

a. How is the income of corporations at the present time double-taxed?
b. Why or how can it be argued that such double taxation discourages equity financing?
c. What is the difference between internal and external financing?
d. Can equity financing be both external and internal?
e. Can nonequity financing (bond financing) be both internal and external?
f. What are some of the provisions of our federal corporation tax law that are alleged to deter internal financing?

10. Randolph Paul, former tax expert in the Treasury Department, has suggested (as reported in *Journal of Accountancy,* Vol. 81, May 1946, pp. 358-59) that corporations be so classified that those which are not considered by their members as entities in themselves be allowed to report their income as if they were partnerships. He also suggested the possibility of relieving stockholders in widely held corporations by differentiation in the tax laws in favor of corporate profits that are distributed.

Argue for or against Mr. Paul's proposal.

11. In the footnote to the discussion of the family partnership on page 563 of Chapter 30 there is a definition of partnership given by the Supreme Court of the United States. Does this definition agree with that of the Uniform Partnership Law as given in the footnote in Chapter 1, page 9?

12. Congress on April 2, 1948, amended the tax laws so as to apply the principle of community property to individual income and gift and estate taxes. For income tax computations, a couple may combine their net incomes and then subtract their total exemptions and deductions. This result is divided by two. They then calculate the tax on this basis and multiply the resulting tax by two. Thus, if a married man earns $20,000 and his wife has a separate income of $5,000 and if the total of the exemptions and deductions are $4000, he and his wife will each report one half of the difference between $25,000 and $4000, or $10,500. They will then compute the tax of each on that basis. The tax paid by the two together will be twice the tax so calculated.

a. Why will the above method of computation mean a lower tax than it would have been without the community-property principle?
b. How does the community-property amendment affect the status of the family partnership?

13. Name four situations in which a court may apply the "instrumentality rule." What was the reason for its application in *Taylor* v. *Standard Gas and Electric?* (One of the most famous cases on this question is *Salomon* v. *A. Salomon,* 66 L.J. Ch. 35, 1897, House of Lords. Be sure to consult this, if available.)

Appendix A

Words and Terms Used with Various Meanings

Book Value

Book value of a bond is the value of a bond on the books of the owner. It is the purchase price plus the total accumulation to date for a discount bond *or* minus the amortization for a premium bond. The amortization or accumulation per period may be calculated either in an exact mathematical way or by an approximate straight line method. (See Chapter 19.)

Book value of a share of common stock is the value of a share of stock as calculated from the books of the corporation. This book value represents the amount that would be allocated to a share of common stock if the company were liquidated. It is often described as the "brick-and-mortar" value. It is necessary, therefore, to subtract the amount of any intangibles. Book value is most conveniently computed as follows: (1) Find the total of the common stock, surplus and undivided profits, and the proprietary reserves; (2) subtract all intangible assets from this total; (3) divide the remainder by the number of shares of common stock actually outstanding. Frequently analysts use only the par value of the common stock plus the capital surplus and earned surplus. If the corporation holds its own stock and has included it as an asset, this item must also be deducted. Many corporations, however, treat the purchase value of treasury and reacquired stock as a subtraction from the proprietary accounts, that is, from the capital stock or from surplus.

Another way of reaching the same result is to subtract the intangible assets from the total assets. This gives an item which is often called the tangible assets. Then subtract from this all the accounts on the liability and proprietary side coming ahead of the common stock. These prior items should include the par figure of the preferred stock, or, in some instances, the call or liquidation figure. The

resulting item should then be the same as the total of the common stock and surplus and proprietary items referred to in the description of the first method. Then divide this by the number of shares of common stock actually outstanding. (See especially Chapter 8.)

Book value of a share of preferred stock. Proceed in the same way as for common stock, but subtract from the tangible assets only those items which are ahead of the preferred stock. Divide this result by the number of preferred shares. The alternative method of doing this is to add the par value of the preferred stock (or, if it has no par, its liquidating value) to the common stock and surplus and proprietary reserve items. Subtract any intangible assets; then divide this total by the number of preferred shares. This concept is not frequently used.

Capital

Capital in the economic sense. To the theoretical economist the term "capital" includes physical man-made goods used for further production, such as tools, machinery, other equipment, and business buildings. The words "capital goods" and "producers goods" are used synonymously with capital in this economic sense. Many economists broaden the economic term "capital" so as to include land.

Capital in the financial sense. Even in this sense, the word has several usages. Some persons use the word to mean "business capital"—that is, all the assets of a company. Others use it to mean the excess of assets over the liabilities owed to outsiders—that is, the contribution received from the stockholders either as original contribution or as retained earnings. In this sense, "capital" would consist of capital stock and all surplus accounts, including surplus or proprietary reserves. A frequent usage is to refer to capital as the sum of the outstanding stocks and long-term debts or bonds. The term "capitalization" is often used to denote this meaning also. In the case of a partnership, the term "capital" means the permanent investment made in the business by a partner. Earnings left in the business subject to withdrawal are not included in the partner's capital.

In commercial banking, the term "capital" is generally used to refer to the total capital stock outstanding. The commercial banker refers to the capital stock and surplus and undivided profits accounts as "capital funds" or sometimes "capital accounts."

Capital stock means the total outstanding shares of a business corporation as represented by the aggregate par value or stated value. The capital stock is divided into "aliquot parts," represented by

stock certificates. If stockholders pay in $100,000 to a corporation for common stock of a par of $100,000, this $100,000 becomes the capital stock. If the company earns money so that its total assets are $150,000, some writers would call this $150,000 capital. The capital stock remains, however, at $100,000 unless, or until, it is changed officially, such as by recapitalization, reorganization, or by the issuance and sale of additional stock.

Impairment of capital. By this is meant the deterioration of the assets of a company or the payment of dividends to such an extent that the assets are no longer adequate to cover the total liabilities and debts and the par or stated value of the capital stock. In other words, the capital stock has in effect been partly paid out or dissipated. A corporation has assets (some would call this capital) worth $200,000. The liabilities to outsiders are $60,000. The capital stock (par value of the shares outstanding) is $100,000. The surplus is $40,000. If the actual value of the assets falls to, say, $140,000, there will be only $80,000 left after taking account of the liabilities. Since the capital stock is still $100,000, there is not enough to cover it. We now say that the capital has been impaired or that the capital stock has been impaired. It is illegal to pay dividends while the corporation is in this condition. The impairment may be removed in two general ways: (1) by accumulating earnings, (2) by recapitalization or decapitalization. (See Chapters 12, 14, and 20.)

Capitalization

The capitalization of a corporation. This term has two common meanings: (1) the total par value of the stocks and bonds outstanding, (2) the total par value of the stocks and bonds plus the surplus and the proprietary reserves. The usage will depend, of course, upon the purpose in mind. To determine whether a corporation is undercapitalized or overcapitalized, compare the value of the investment of the company—determined often by a special process, such as capitalization of earnings—with the par value of the outstanding stocks and bonds. This involves the use of the term "capitalization" in the first sense. If you refer to return on the capitalization, reference is generally made to the total stocks and bonds plus the surplus and surplus reserves. This constitutes the use of the word in the second sense. Frequently this aggregate of the stocks and bonds and surplus items is referred to as the total long-term investment.

The capitalization of earnings. If the earnings are assumed to be perpetual, this term refers to the act of dividing the average expected

net annual income before fixed charges but after taxes by a rate of return considered characteristic of that corporation and of the industry. If the earnings are limited to a term of years, such as in the case of a bridge which will become the property of the city after the expiration of the franchise, it is necessary to find the discounted present value of each year's probable earnings. The total of these discounted values represents the capitalized or present value of the bridge.

The capitalization of expenses. If a corporation conducts a large and unusual advertising campaign or incurs substantial expenses for certain organizational items, it may consider these costs as an asset rather than an expense. This is called the capitalization of expenses. The resulting asset account will then be written down over a short period, say, three or five years, one third or one fifth, as the case may be, then being added (charged or debited) to expense each year. To treat an account as a "capital expenditure" means to capitalize it, that is, to consider it as an asset rather than as an expense.

The capitalization of profits. This term is often used to designate the act or process of transferring profits into permanent capital. If partners leave their share of the net income with the firm as capital rather than in a current or drawing account, their profits are said to be capitalized. In the case of a corporation, the distribution of a stock dividend out of earned surplus constitutes a capitalization of profits.

Equity

A system of jurisprudence. This grew out of certain rigidities and inadequacies which had developed in the common law. One of the chief difficulties in common law was the measuring or assessing of damages in the case of the breach of a contract for the sale of an article or of a right having a peculiar or inherent quality or nature which made it unavailable elsewhere. Illustrations are land, paintings, and patent rights. Here equity developed the remedy of specific performance. Other equity remedies include, to mention only a few, the injunction to prevent irreparable damage by the committing of illegal and tortious acts, the equity of redemption to prevent injustice in the case of inability to settle a mortgage debt on the "law day," and the right, under certain conditions, of rescinding a contract.

Stock equity. The total stock equity is the sum of both the preferred and common stocks (if no par, the stated values) and the surplus and surplus items. This is also called net worth. The common stock equity consists of the total figure as just found, minus the preferred stock. That is, the common stock equity consists of

the total par or stated value of the common stock plus the surplus and surplus items. When you divide this total common stock equity (after subtracting the intangible assets, if any) by the number of shares of common stock outstanding, the result is the book value of a share of common stock. See also **Book Value** in this Appendix.

Equity securities. This refers to securities whose rights are not based upon the *law* but rather upon equitable remedies and privileges. Stock is an equity security. Neither common nor preferred stockholders can by law compel the payment of a dividend. In contrast, a bond is a legal (nonequity) security, in that its holders have specific legal remedies and rights in the event of failure to pay principal or interest.

Equity behind bonds or liabilities. This is an expression sometimes rather loosely used to represent the balance of the net value (value after depreciation) of pledged or mortgaged property over the amount of the debt. If the value of a mortgaged building is $10,000 and the amount of the debt is $4000 the equity is $6000, or the ratio between the building and the debt is 2½ to 1. If earned cash is used to pay off $1000 of the debt, with no change in the value of the building, the equity becomes $7000, or the ratio is 3⅓ to 1. In other words, the "equity" has been thickened. Sometimes the term equity in this sense is used to represent the difference between the total assets and the amount of the funded debt or bonds.

Reserve

In corporation finance and accounting there are three main classes of "reserves." These are: (1) valuation reserves, (2) liability reserves, and (3) surplus and proprietary reserves.

Valuation reserves. These include allowances made for depreciation and obsolescence of fixed assets and allowances made against notes and accounts receivable and investments for an estimated percentage which may not be collectible. The depreciation reserve is set up against specific assets in varying amounts, depending on their probable life. Since the bad debts reserve naturally cannot be set up against individual or specific accounts and notes, it really constitutes a form of insurance. The valuation reserve may be carried on the asset side of the balance sheet as a subtraction from the appropriate asset, the *net* value after such subtraction being included under the asset side of the balance sheet, or it may be placed on the liability side. The best practice favors the first of

these methods. The setting aside of these allowances constitutes, in general, expenses of the corporation.

Liability reserves. These are allowances for accounts which have not yet become real debts or for debts whose exact amount has not yet been ascertained. A reserve for property taxes is created by a charge against expense for the year, and a reserve for damage claims might be created by a charge against surplus, particularly if the claim is an unusual one or one of long standing.

Surplus and proprietary reserves. These are reserves set aside now and then out of surplus or year after year out of income to accomplish two chief purposes. The first is to protect against certain adverse developments which it is hoped will not happen but which may occur in varying degrees over a long period of years. Examples are reserves for contingencies, reserves for the fall in the value of foreign exchange held, or, perhaps, insurance reserves. If the insurance reserve is added to regularly and drawn upon frequently, it should not generally be considered a surplus reserve. The second purpose of surplus reserves is to make provision for extensions of, or additions to, plant and for sinking funds for bonds and preferred stocks.

The setting aside of such surplus reserves serves as a sort of notice to people concerned that these amounts are not available for and are not intended for immediate dividend distribution. These reserves, however, are generally discretionary and could, if the directors so decide, legally be paid out as dividends, though the financial wisdom of such action might be questionable.

The term "reserve" is used in other connections. *In insurance,* it generally represents an account to take care of future contractual payments to policyholders. Specifically in the case of life insurance, reserves are calculated at such an amount which, together with interest and future premiums, will be sufficient to provide the funds for future "death and disability benefits, maturity values, annuity income, and other contractual payments to members and beneficiaries." (Quotation from the 1946 Annual Report of the Equitable Life Assurance Society of the United States.)

Though these reserves are often called "reserve funds," they are strictly not funds. They are liability accounts. The investment of the funds represented on the asset side by such reserves is strictly regulated by the states. These constitute the bulk of the investments of insurance companies discussed in Chapter 25.

In the field of *commercial banking,* "reserves" are generally asset accounts. To refer to the Federal Reserve System, legal reserve

represents the balance which a member bank has with the Federal Reserve bank in its district. In the case of a nonmember bank such reserve may be in the form of cash on hand or in balances with other banks, depending on the law and the banking regulations of the state.

Both commercial banks and insurance companies also may, and do, set up valuation, liability, and proprietary reserves whenever occasion demands, the same as any other business organization.

Return on Investment

This term is used in several ways.

1. The return on the total long-term investment. (One method) The ratio between the net income and the sum of the net fixed assets and the net current assets, such ratio being expressed as a percentage. The net income for this calculation is the figure arrived at after all costs and expenses and all taxes have been paid or allowed, but before interest on the long term debt and various other fixed charges, such as amortization of bond discount.

2. The return on the total long-term investment. (Another method) The ratio between the net income as computed in (1) above to the par value of the total stocks and bonds and the surplus accounts. For public utilities the method of computation in Number 1 is considered preferable to that described in this paragraph.

3. The return on the stock investment. This is the ratio between the net income after interest and fixed charges to the total par value of common and preferred stock and the surplus accounts. This is frequently referred to as the return on the net worth.

4. The return on the common stock investment, or, as it is often put, the return on the common stock equity. This is the ratio between the net income after the interest and fixed charges and the preferred stock dividends, to the total of the par value of the common stock and the surplus accounts.

In determining the total long-term investment, the stock investment, or the common stock investment, it is desirable to subtract the amount of any intangible assets. All these ratios are expressed as percentages.

(Note: In the computations described in this appendix, if the stock has no par value, the stated value should generally be used.)

Extracts from Original Articles of Association, with Amendments thereto, of Union Pacific Railroad Company, under the Utah Railroad Corporation Act of January 22, 1897 *

ARTICLE 1. The corporate name of the corporation hereby formed shall be "Union Pacific Railroad Company." By that name the persons subscribing these Articles of Association and all persons who may from time to time become shareholders in the corporation hereby formed shall have perpetual succession, with power to adopt a common seal, to sue and be sued, to acquire and hold and convey property, to make contracts, fix and prescribe tariffs and rates of compensation for the carriage of persons and property, and generally to do all acts necessary or proper to carry into effect the powers and purposes of said corporation.

ARTICLE 2. Said corporation shall continue in existence for a period of fifty years from the date of the filing of these articles of association in the office of the Secretary of State of the State of Utah.

ARTICLE 3. Said corporation shall possess all of the powers, rights and franchises specified, referred to or provided for in these Articles of Association, and also all of the powers which by said Act above entitled ["An Act to provide for the formation of railroad corporations . . ."] approved January 22, 1897, corporations formed under and pursuant to said Act are entitled to have, possess and enjoy, as fully as if all the provisions of the said Act in this behalf were herein set forth at large, and also all the powers, rights, privileges and franchises of railroad corporations organized under the

* Original capitalization and punctuation have been retained.

laws of the State of Utah, or under the laws of other States or Territories or of the United States, as hereinafter provided.

ARTICLE 4. The amount of the capital stock of the said corporation shall be one hundred and thirty-six million dollars ($136,000,000), which shall be divided into and represented by one million three hundred and sixty thousand (1,360,000) shares of the par value of one hundred dollars ($100) each, and each of which shares shall be entitled to one vote at any meeting of stockholders.

Of such capital stock, seven hundred and fifty thousand (750,000) shares of one hundred dollars ($100) each may be issued as preferred stock, and six hundred and ten thousand (610,000) shares of one hundred dollars ($100) each may be issued as common stock.

Such preferred stock shall be entitled in preference and priority over the common stock of said corporation to dividends in each and every fiscal year at such rate not exceeding four per cent. per annum, payable out of net profits, as shall be declared by the Board of Directors. Such dividends are to be non-cumulative and the preferred stock is entitled to no other or further share of the profits. The directors may adopt proper by-laws to carry into effect the provisions of this article.

ARTICLE 5. The number of directors to manage and control the affairs of this Corporation shall be fifteen, and the names and residences of those who shall serve as directors for the first year and until their successors are chosen and qualified are: [Here follow the names and addresses of the directors].

ARTICLE 6. The said corporation is organized and formed for, and shall have the power, to purchase, own, hold, enjoy, maintain, operate and further extend the railroad, property, rights and franchises, or any part thereof, belonging to The Union Pacific Railway Company, a corporation formed by Articles of Union and Consolidation between The Union Pacific Railroad Company, the Kansas Pacific Railway Company and the Denver Pacific Railway and Telegraph Company, which Articles of Union and Consolidation bear date January 24, 1880, and were filed in the Department of the Interior of the United States at Washington, in the District of Columbia, on or about January 26, 1880.

The said corporation hereby formed shall have the power to acquire, possess, and enjoy the lands and land grants, or any part thereof, and all rights with respect thereto of the said The Union Pacific Railway Company or any or either of its constituent companies; And the said corporation hereby formed shall have power

to construct or acquire by lease, purchase, consolidation, ownership of capital stock, or otherwise, branches, extensions and connecting or auxiliary lines within or without this State, as the board of directors may from time to time deem expedient and as may be authorized by law.

The termini of the said railroad which the said corporation hereby formed is authorized to acquire, enjoy and operate, as now constructed, and the States and counties through which the said railroad passes are as follows, to wit: [Here follow a description and location of the property].

Together with such branches and extensions of said railroad or railroads, or any part thereof, as the company hereby formed may from time to time be authorized by law to construct, operate, acquire and maintain.

ARTICLE 7. The corporation hereby formed shall be vested with and entitled to exercise and enjoy all the powers, rights, privileges and franchises which at the time of the acquisition of the said railroads by the corporation hereby formed, or at the time of the sale thereof, under judicial proceedings, or in the enforcement of mortgage or other liens or at private sale, belonged to or were vested in The Union Pacific Railway Company or in the corporation or corporations last owning the said railroads and properties, as well as all the rights, privileges and franchises of railroad corporations organized under the laws of the State of Utah, including the aforesaid recited Act of the legislature of the State of Utah, approved January 22, 1897; and said corporation shall also possess in each State or Territory as respects its railroads or any branches or extensions thereof situate therein, all of the powers, rights, privileges and franchises of railroad corporations organized under the laws of such State or Territory or of the United States.

ARTICLE 8. The corporation hereby formed may construct or acquire by lease, purchase, consolidation, ownership of capital stock, or otherwise, branches, extensions and connecting lines within or without this State, and for such purposes, or any of them, may from time to time create and issue its stock, common or preferred, or both, and execute bonds and mortgages for such sum or sums, and payable at such times and places and drawing such rate of interest as the directors may deem proper, and may use such stock and bonds, or any part thereof, in payment of property to be purchased by such corporation or the improvement or extension thereof upon such terms as the directors may deem expedient, may guarantee

the bonds or obligations of extension, branch, connecting or auxiliary lines of railroad, and in exercising its corporate powers, it may make such leases, purchases, contracts, conveyances, consolidations and do such acts as the directors may deem necessary or expedient not inconsistent with these Articles or with the Constitution and laws of the State of Utah. The company hereby formed may also consolidate with or merge itself into any other railway company or companies in this or other States or Territories pursuant to law. It may also from time to time amend these Articles of Association by filing amended Articles of Association, increasing the capital stock, or otherwise, agreeably with law, enlarging or changing the powers of the corporation hereby formed.

ARTICLE 9. The Board of Directors of said corporation may from time to time adopt and change by-laws not inconsistent with the provisions of these Articles or the Constitution and laws of the State of Utah. Said by-laws shall provide for annual elections of directors by the stockholders and for the election by the directors of a President and Vice-President and for the election or appointment of such other officers as shall be prescribed in such by-laws. Shareholders' or other corporate meetings may be held at such place or places in the United States as the by-laws may prescribe.

ARTICLE 10. Stockholders shall not be individually liable for the debts of the corporation.

This corporation does not assume and shall not be liable for the debts, obligations or liabilities of the Union Pacific Railway Company or of any corporation or company whose powers, rights, privileges, railroads and franchises it shall purchase or acquire.

IN TESTIMONY WHEREOF, we have hereunto subscribed our names this 23rd day of June, 1897.

[Signed by Incorporators].

First Amendment, filed January 10, 1899

Know all men by these presents, that Union Pacific Railroad Company, a corporation organized and existing under the laws of the State of Utah, does hereby, for the purpose of increasing its common capital stock by the amount of $27,460,100, amend its Articles of Association by substituting as Article 4 thereof, and in the place of said Article as originally and heretofore existing, the following:

"ARTICLE 4. The amount of the capital stock of the said corporation shall be One hundred and sixty-three million four hundred and sixty thousand one hundred dollars ($163,460,100), which shall be divided into and represented by One million six hundred and thirty-four thousand six hundred and one (1,634,601) shares of the par value of One hundred dollars ($100) each, and each of which shares shall be entitled to one vote at any meeting of stockholders.

"Of such capital stock Seven hundred and fifty thousand (750,000) shares of One hundred dollars ($100) each may be issued as preferred stock, and Eight hundred and eighty-four thousand six hundred and one (884,601) shares of One hundred dollars ($100) each may be issued as common stock.

"Such preferred stock shall be entitled in preference and priority over the common stock of said corporation, to dividends in each and every fiscal year at such rate not exceeding four per cent. per annum, payable out of net profits, as shall be declared by the Board of Directors. Such dividends are to be non-cumulative, and the preferred stock is entitled to no other or further share of the profits. The directors may adopt proper by-laws to carry into effect the provisions of this Article."

Dated January 10th, 1899.

Second Amendment, filed October 9, 1899
[Further increased capital stock.]

Third Amendment, filed March 23, 1901
[Further increased capital stock.]

Fourth Amendment, filed May 9, 1905
[Further increased capital stock.]

Fifth Amendment, filed June 24, 1907
[Further increased capital stock.]

Sixth Amendment, filed May 9, 1945

KNOW ALL MEN BY THESE PRESENTS that UNION PACIFIC RAILROAD COMPANY, a corporation organized and existing under the laws of the State of Utah, does hereby, for the purpose of extending its corporate existence for fifty years to 1997, amend its Articles of

Incorporation by substituting as Article 2 thereof, and in place of said Article as originally and heretofore existing, the following:

"ARTICLE 2. Said corporation shall continue in existence for the period of one hundred years from the date of the filing of these articles of association in the office of the Secretary of State of the State of Utah."

Dated the 8th day of May, 1945.

Appendix C

Characteristics of Preferred Stock

Characteristics of Registered * Preferred Stocks in 1937 by Industry Groups †

Industry	Total number of issues	Have par value	Cumulative	Participating	Limitation on dividend payments	Callable	Convertible	Have preemptive rights	Ordinarily possessing voting rights
Agriculture	6	6	6	1	0	4	0	2	5
Extractive	28	23	20	8	4	22	10	7	17
Manufacturing	398	278	371	56	61	312	118	75	194
Financial	39	28	36	8	5	33	9	7	13
Merchandising	89	67	85	7	7	71	23	11	27
Real estate	7	5	7	1	0	7	1	1	0
Construction	9	2	9	2	2	7	2	2	5
Transportation & communication	25	19	21	3	4	14	5	4	21
Service	21	10	20	4	7	18	8	3	7
Electric, gas, heat & water companies	123	61	115	10	17	100	6	7	53
Miscellaneous	4	3	4	0	0	4	0	0	0
Grand total	749	502	694	100	107	592	182	119	342

* By "registered" is meant securities that have been registered before the Securities and Exchange Commission, either under the Securities Act or under The Securities Exchange Act. These securities do not include those of railroads responsible to the Interstate Commerce Commission or of communication companies subject to the jurisdiction of the Federal Communications Commission or of banks and trust companies.

† Source: Securities and Exchange Commission, *Statistics of American Listed Corporations*, Part I (1940), Table 29.

THE CHARACTERISTICS OF THE 3.65 PERCENT CUMULATIVE PREFERRED STOCK AND OF THE COMMON STOCK OF H. J. HEINZ COMPANY

The following extracts are taken from the prospectus on October 10, 1946, announcing the intended issuance by this company of 100,000 shares of 3.65 percent cumulative preferred stock and 200,-

000 shares of common stock. The prospectus is a summary of the important facts found in the registration statement as filed with the Securities and Exchange Commission; therefore, it contains references at times to this basic document.

DESCRIPTION OF CAPITAL STOCK

The Articles of Incorporation, as amended, of the Company divide the authorized shares of the Company into three classes of stock designated respectively "4% Cumulative Preferred Stock," "Cumulative Preferred Stock" and "Common Stock."

The following is a brief summary of certain provisions relating to the 4% Cumulative Preferred Stock, the Cumulative Preferred Stock and the Common Stock and does not purport to be complete. A full statement of the provisions relating to said classes of stock is found in the Articles of Amendment filed with the registration statement as Exhibit 1(b), incorporated herein by reference, and the following summary is qualified in its entirety by said reference.

4% CUMULATIVE PREFERRED STOCK ($100 Par Value):

The Articles of Incorporation, as amended, of the Company authorize 50,000 shares of 4% Cumulative Preferred Stock of the par value of $100 each.

The Company will, prior to or upon delivery of the securities being offered hereunder, irrevocably call for redemption on or before January 1, 1947, all the shares of 4% Cumulative Preferred Stock, and will deposit sufficient funds to effect such redemption. Said shares will be retired and canceled and the authorized capital will be reduced accordingly. For this reason no further reference is made herein to such 4% Cumulative Preferred Stock.

3.65% CUMULATIVE PREFERRED STOCK ($100 Par Value):

The Articles of Incorporation, as amended, of the Company authorize 200,000 shares of Cumulative Preferred Stock of the par value of $100 each, issuable in series. The Board of Directors is authorized, before issuance thereof, to fix (a) the distinctive serial designation of each series, (b) the rate of dividend, (c) the redemption price or prices, and (d) the terms of any sinking fund for redemption or purchase of shares. All shares of the Cumulative Preferred Stock are to be of equal rank with each other, regardless of series, and are to be identical with each other in all respects except as described in this paragraph, and the shares of any one series of Cumulative Preferred Stock are to be identical with each other in all respects.

Pursuant to such authority the Board of Directors has designated 100,000 shares of the Cumulative Preferred Stock as a series to be known as the "3.65% Cumulative Preferred Stock." A full statement of the provisions relating to such series is found in the Statement with respect to the 3.65% Cumulative Preferred Stock filed with the registration statement as Exhibit 1(c), incorporated herein by reference, and the following summary is qualified in its entirety by such reference.

Dividend Rights:

The holders of shares of each series of Cumulative Preferred Stock will be entitled to receive in preference to the holders of stock ranking junior to the Cumulative Preferred Stock, when and as declared by the Board of Directors, cumulative quarterly dividends at the rate fixed by the Board of Directors prior to the issuance thereof and no more. Dividend payment dates are January 1, April 1, July 1 and October 1 in each year, and dividends are to be paid or set apart for payment and are cumulative from and after the dividend payment date next preceding the date of issuance of such shares.

The dividend rate for the shares of 3.65% Cumulative Preferred Stock is fixed at and limited to 3.65% of the par value per annum. The first dividend payment date for such series will be January 1, 1947, and dividends will be cumulative from October 1, 1946.

Reference is made to the information set forth below with respect to restrictions on the payment of dividends on stock ranking junior to the Cumulative Preferred Stock.

Voting Rights:

Except as otherwise provided in paragraphs (A) and (B) set forth below and except as otherwise expressly provided by law, the Cumulative Preferred Stock shall have no right to vote and all voting rights shall be vested exclusively in the holders of the Common Stock.

(A) Unless and until six quarter-yearly dividends payable on the Cumulative Preferred Stock of any series shall be in default, in whole or in part, the entire voting power and all voting rights, except as otherwise provided in paragraph (B) below or by statute, shall be vested exclusively in the Common Stock. If and when six quarter-yearly dividends payable on the Cumulative Preferred Stock of any series shall be in default, in whole or in part, the holders of the outstanding Cumulative Preferred Stock, voting separately as a class, regardless of series, shall, in addition to the voting rights provided in paragraph (B) below, become entitled to elect two Directors, who shall be additional Directors to the then existing Board, and the holders of the Common Stock, voting separately as a class, shall be entitled to elect the remaining Directors of the Company. When all dividends then in default

on the Cumulative Preferred Stock of each series then outstanding shall thereafter be paid, the Cumulative Preferred Stock shall then be divested of such voting power, but always subject to the same provisions for the vesting of such voting power in the Cumulative Preferred Stock in case of any similar future default or defaults.

(B) So long as any shares of any series of Cumulative Preferred Stock are outstanding, the Company, without first obtaining the affirmative consent or vote of the holders of at least two-thirds of the shares of Cumulative Preferred Stock at the time outstanding, shall not

(1) authorize, or increase the authorized amount of, any class of stock of the Company ranking prior to or on a parity with the Cumulative Preferred Stock, or increase the authorized amount of the Cumulative Preferred Stock;

(2) amend, alter or repeal any of the provisions of the Articles of Incorporation of the Company so as to affect adversely the rights or preferences of the Cumulative Preferred Stock; provided, however, that if any such amendment, alteration or repeal shall affect adversely the rights or preferences of one or more, but not all, of the series of Cumulative Preferred Stock at the time outstanding, the consent of the holders of at least two-thirds in interest of the shares then outstanding of each series so affected, similarly given, shall be required in lieu of the consent of the holders of two-thirds of the Cumulative Preferred Stock voting as a class;

(3) sell, lease or convey all or substantially all of the property or business of the Company, or consolidate or merge with any other corporation;

(4) redeem less than all of the shares of Cumulative Preferred Stock at the time outstanding or purchase any shares of Cumulative Preferred Stock except in accordance with a purchase offer made to all holders thereof, unless the full dividend on the Cumulative Preferred Stock for all past quarter-yearly dividend periods shall have been paid or declared and a sum sufficient for the payment thereof set apart.

No such vote of the holders shall be required, however, if at or prior to the time when the act with respect to which such vote would otherwise be required shall be effected, appropriate provision is made for the redemption of all shares of Cumulative Preferred Stock at the time outstanding.

Liquidation Rights:

The holders of the Cumulative Preferred Stock outstanding shall be entitled to be paid in cash upon voluntary liquidation, dissolution or winding up of the Company the respective amounts which such holders would have been entitled to receive had such shares been redeemed otherwise than for a sinking fund, and upon any involuntary liquidation, dissolu-

tion or winding up of the Company, an amount equal to $100 per share, together with all unpaid accrued dividends thereon, in each case before any distribution of assets is made on any stock ranking junior to the Cumulative Preferred Stock. The consolidation or merger of the Company with any other corporation shall not be deemed, as such, to constitute a liquidation, dissolution or winding up of the Company within the foregoing provisions. For the purpose of such provisions, any reorganization of the Company required by any court or administrative body to comply with any provision of law shall be deemed to be an involuntary liquidation, dissolution or winding up of the Company unless the preferences, qualifications, limitations, restrictions and special or relative rights granted to or imposed upon the Cumulative Preferred Stock are not adversely affected by such reorganization.

Preemptive Rights:

The holders of the Cumulative Preferred Stock shall have no preemptive rights to subscribe to any issue of stock or other securities of any class of the Company.

Redemption Provisions:

The Cumulative Preferred Stock may be redeemed, as a whole or in part, at the option of the Company by resolution of its Board of Directors at any time upon not less than thirty days' notice at the optional redemption price for said series; or by the operation of the sinking fund, if any, provided for the Cumulative Preferred Stock of such series, on any dividend payment date, on like notice.

The redemption prices for the 3.65% Cumulative Preferred Stock shall be as indicated below for optional or sinking fund redemption:

From	To and Including	Optional Redemption Prices	Sinking Fund Redemption Prices
Oct. 1, 1946	Oct. 1, 1951.......	$107.75	$105.25
Oct. 2, 1951	Oct. 1, 1954.......	106.75	104.75
Oct. 2, 1954	Oct. 1, 1957.......	105.75	104.25
Oct. 2, 1957	Oct. 1, 1960.......	104.75	103.75
Oct. 2, 1960	Oct. 1, 1963.......	103.75	103.25
Thereafter......................		102.75	102.75

In all cases together with all unpaid accrued dividends.

Sinking Fund:

The shares of 3.65% Cumulative Preferred Stock are subject to the operation of a sinking fund as follows: On or before October 1 in each year beginning with the year 1947, the Company shall pay to the Sinking

Fund Agent from the surplus, net earnings or other funds of the Company properly made applicable thereto by the Board of Directors, as a sinking fund for the purchase or redemption of the 3.65% Cumulative Preferred Stock, an amount equal to the lesser of (a) $200,000 or (b) the consolidated net earnings of the Company and its subsidiaries for the preceding fiscal year computed after the deduction of an amount equal to the dividends payable during the preceding fiscal year on the shares of Cumulative Preferred Stock outstanding during such fiscal year, exclusive of shares, if any, held in the treasury of the Company. The sinking fund shall be used by the Sinking Fund Agent from time to time for the purchase of 3.65% Cumulative Preferred Stock in the open market, from the Company, or otherwise at prices not exceeding the then current sinking fund redemption price, together with all accrued and unpaid dividends on such shares to the date of such purchase. If on any February 15, the balance, if any, in the sinking fund which has not been expended in the purchase of 3.65% Cumulative Preferred Stock as above provided shall equal or exceed $50,000, such balance shall be, and, if less, at the option of the Company may be, applied forthwith to the redemption on the next April 1 of 3.65% Cumulative Preferred Stock at the then current sinking fund redemption price, together with all unpaid accrued dividends thereon. Any such balance not applied to redemption may be used from each April 1 to the following October 1 for the purchase of 3.65% Cumulative Preferred Stock upon the terms and in the manner hereinbefore provided, and any such balance not so used on said October 1 shall be carried forward and added to the amount of the sinking fund payable on that date. Any shares of 3.65% Cumulative Preferred Stock at any time purchased or otherwise acquired by the Company other than through operation of the sinking fund may, at the option of the Company, be credited against any amounts required to be paid to the Sinking Fund Agent for the sinking fund at their cost to the Company but not in excess of the amount, including accrued and unpaid dividends, to which such shares would be entitled upon redemption at the sinking fund redemption price if redeemed as of the date such credit is taken. All shares acquired for or by operation of the sinking fund shall forthwith be cancelled and the capital stock of the Company reduced in the manner provided by law.

COMMON STOCK ($25 Par Value)

Dividend Rights:

The rights of holders of Common Stock to receive dividends are subject to the prior rights of the holders of shares of the Cumulative Preferred Stock. Subject to such prior rights, the holders of the Common Stock are entitled to receive such dividends as may lawfully be declared by the Board of Directors.

So long as any shares of Cumulative Preferred Stock remain outstanding, no dividends shall be paid or declared on any stock ranking junior to the Cumulative Preferred Stock nor shall any distribution be made on any junior stock, other than a dividend payable in junior stock, nor shall any shares of any junior stock be acquired for a consideration by the Company (1) unless all dividends on the Cumulative Preferred Stock shall have been paid and the full dividend thereon for the then current dividend period shall have been paid or shall have been declared and a sum sufficient for the payment thereof set apart, (2) if any default exists in any sinking fund requirement on any series of the Cumulative, Preferred Stock and (3) unless, after giving effect to any such dividends or distribution on junior stock (other than those payable in junior stock) or such acquisition of junior stock, the aggregate payments for all such purposes subsequent to April 30, 1946, do not exceed the sum of (i) consolidated net income available for junior stock earned subsequent to April 30, 1946; (ii) $7,500,000, and (iii) the net proceeds received by the Company after December 31, 1946, from the sale of shares of junior stock.

Voting Rights:

The holders of the Common Stock are entitled to one vote for each share held. Reference is made to the information set forth above with respect to the voting rights of the holders of Cumulative Preferred Stock.

Liquidation Rights:

Upon liquidation of the Company the Common Stock is subject to the prior rights of the Cumulative Preferred Stock.

Preemptive Rights:

No holder of Common Stock shall have any preemptive right to subscribe for or purchase any shares of the Company of any class whatsoever, or of securities convertible into shares of the Company of any class whatsoever, whether now or hereafter authorized and whether issued for cash or other consideration or by way of dividend.

Other Provisions:

The 3.65% Cumulative Preferred Stock and the Common Stock have no conversion rights. They will be fully paid and non-assessable, except that holders thereof may under Section 514 of the Pennsylvania Business Corporation Law be subject to liability up to the par value of their shares for salaries and wages to employees and laborers not paid by the Company.

As used herein, the phrase "stock ranking junior to the Cumulative Preferred Stock" shall mean the Common Stock and any other stock

which is junior to the Cumulative Preferred Stock as to the payment of dividends or as to distributions upon liquidation.

All classes of the Company's stock are transferable at the office of City Bank Farmers Trust Company, New York, N. Y., and Mellon National Bank and Trust Company, Pittsburgh, Pa. Guaranty Trust Company of New York, N. Y., and Fidelity Trust Company, Pittsburgh, Pa., are registrars of all classes of the Company's stock.

Of the consideration to be received from the sale of said 100,000 shares of 3.65% Cumulative Preferred Stock and 200,000 shares of Common Stock, the par value of such shares is to be credited to capital shares and any sum in excess of par value is to be credited to capital surplus.

Appendix D

Characteristics of Bond Issues

CHARACTERISTICS OF REGISTERED * BOND ISSUES IN 1937 BY INDUSTRY GROUPS †

Industry	Total	Serial	Retirement by sinking fund	Secured by lien	Callable other than for sinking fund	Convertible	Additional amounts can be issued under the same indenture
Agriculture.......	2	0	2	2	2	0	0
Extractive	23	0	20	22	20	1	7
Manufacturing . .	128	1	117	70	117	36	39
Financial	20	2	7	11	19	7	2
Merchandising ...	10	0	9	3	9	1	4
Real estate	7	0	7	6	6	0	0
Construction	1	0	1	0	1	1	0
Transportation & communication..	48	0	20	41	33	2	21
Service	13	1	11	6	12	3	5
Electric, gas, heat & water companies	212	0	74	185	182	6	159
Miscellaneous .. .	2	0	2	2	2	0	2
Grand total	466	4	270	348	403	57	239

* By "registered" is meant securities that have been registered before the Securities and Exchange Commission, either under the Securities Act or under the Securities Exchange Act. These securities do not include those of railroads responsible to the Interstate Commerce Commission or of communication companies subject to the jurisdiction of the Federal Communications Commission or of banks and trust companies.

† Source: Securities and Exchange Commission, *Statistics of American Listed Corporations*, Part I (1940), Table 20.

EXTRACTS FROM THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY GENERAL MORTGAGES TO UNION TRUST COMPANY OF NEW YORK, BACKING GENERAL MORTGAGE 4 PER CENT BONDS, DUE 1995

The Granting Clause

Now, therefore, this indenture witnesseth: That in order to secure the payment of the principal and interest, according to their tenor

and effect, of all such bonds issued hereunder and at any time outstanding, and the performance and observance of the covenants and conditions hereinafter contained, and for and in consideration of the premises, and of the purchase and acceptance of said bonds by the holders thereof, and of the sum of one dollar to it duly paid by the Trustee at or before the ensealing and delivery of these presents, the receipt whereof is hereby acknowledged, the Railway Company has executed and delivered these presents, with all the covenants and conditions herein contained, and has granted, bargained, sold, assigned, released, conveyed, confirmed and set over, and by these presents does grant, bargain, sell, assign, release, convey, confirm and set over, unto the Trustee, party of the second part hereto, and its successors and its and their assigns forever, all and singular the following railroads, estates, properties, rights, franchises and privileges of the Railway Company, and bonds and shares in the capital of other companies, now owned or hereafter to be acquired by it—that is to say:

[Here follows a long list of all the property so granted, subject to other mortgages, whenever such prior claims are outstanding. Many of these senior mortgages have in the course of time been paid off, and today, in effect, the general mortgage is really a first lien on most of the property.]

The Habendum Clause

To have and to hold the said premises, railroads, stocks, bonds and all other property, real or personal, rights, franchises, estates, appurtenances hereby conveyed or assigned, or intended to be hereby conveyed or assigned, unto the Trustee, its successor or successors and assigns forever.

The Trust Clause

But in trust, nevertheless, for the equal and proportionate benefit and security of any and all of such Prior Lien bonds issued, and to be issued, hereunder, and subject thereto, for the equal and proportionate benefit and security of any and all of said General Mortgage bonds issued, and to be issued, hereunder, for the purpose of enforcing payment of principal and interest of said bonds when due, and compliance with the covenants and conditions contained in this indenture, so that the said Prior Lien bonds, without regard to the time of actual issue, shall have priority and prefer-

ence as to both principal and interest over the said General Mortgage bonds, and that the said General Mortgage bonds shall all be subject to the prior and superior lien of said Prior Lien bonds, and so that each bond of either of said two issues of bonds, issued and to be issued as aforesaid, shall have, under and by this indenture, the same right, lien and privilege as every other bond of the same issue, as though all had been made, executed, delivered and negotiated simultaneously with the execution and delivery of this indenture; it being intended that the lien and security of this indenture shall take effect from the day of the date hereof, without regard to the date of actual issue, sale, or disposition of said bonds, and as though upon such date all of said bonds were actually issued, sold and delivered to, and in the hands of, innocent holders for value.

And it is hereby expressly covenanted that all such bonds and the coupons for interest thereon shall be issued, certified and delivered, received and negotiated, and that the mortgaged properties and premises are hereby conveyed, assigned and transferred by the Railway Company, and are to be held by the Trustee, subject to the further covenants, conditions, uses and trusts hereinafter set forth, and it is covenanted between the parties hereto as follows, viz.:

[Here follows a detailed statement as to the conditions to which these and additional authorized bonds are to be issued.]

The Defeasance Clause

If the said Railway Company shall well and truly pay, or cause to be paid, the principal and interest of all bonds hereby secured at the times and in the manner therein specified, and shall well and truly keep and perform all the things herein required to be kept and performed by it, according to the true intent and meaning of this indenture, then and in that case all property, rights and interests hereby conveyed or pledged shall revert to the Railway Company, and the estate, right, title and interest of the Trustee shall thereupon cease, determine and become void; otherwise, the same shall be, continue and remain in full force and virtue.

Form of General Mortgage Coupon Bond

For value received, the Atchison, Topeka and Santa Fe Railway Company (hereinafter termed the Railway Company), a corporation organized under the laws of Kansas in December, 1895, promises

to pay to bearer, or, if this bond be registered as hereinafter provided, to the registered holder thereof, the sum of one thousand dollars gold coin of the United States of the present standard of weight and fineness, or its equivalent, on the 1st day of October, one thousand nine hundred and ninety-five, at the office or agency of the Railway Company in the City of New York, and to pay interest thereon from October 1st, 1895, until said principal shall become due, at the rate of four per cent. per annum, payable in like gold coin, semi-annually, at said office or agency, on the first days of April and October in each year, upon presentation and surrender of the respective coupons therefor, annexed and to be annexed hereto, as they severally become due. Upon presentation of this bond on or after October 1st, 1945, the Railway Company will attach thereto sheets of coupons representing the interest installments to become due after that date, proper indorsement thereof being made on the bond.

Both the principal and interest of this bond are payable without deduction for any tax or taxes which the Railway Company may be required to pay or to retain therefrom by any present or future law of the United States or of any State or Territory thereof; the Railway Company hereby agreeing to pay such tax or taxes.

No recourse shall be had for the payment of the principal or interest of this bond against any stockholder, officer or director of the Railway Company, either directly or through the Railway Company, by virtue of any statute or by enforcement of any assessment or otherwise.

This bond is one of a series of similar General Mortgage Four Per Cent. One Hundred-Year Gold Bonds, coupon and registered, issued and to be issued in pursuance of, and all to be equally secured by, a mortgage or deed of trust dated December 12, 1895, executed by the Railway Company to the Union Trust Company of New York as Trustee, covering the property and franchises of the Railway Company as therein described, to which mortgage or deed of trust reference is hereby made for a description of the property and franchises mortgaged, and the rights of the holders of said bonds under the same, and the terms and conditions upon which said bonds are issued.

This bond shall pass by delivery unless registered in the owner's name upon the bond transfer books of the Railway Company, such registration being noted on the bond by the bond registrar of the Railway. After such registration no transfer of this bond shall be

valid unless made on said books by the registered owner, or his attorney, and similarly noted on the bond; but the same may be discharged from registry by being transferred to bearer, after which transferability by delivery shall be restored, and it shall continue subject to successive registrations and transfers to bearer as before. Such registration, however, shall not effect the negotiability of the coupons, but the same shall continue to be transferable by delivery notwithstanding registration of the bond. The holder may also, at any time, at his option, surrender for cancellation this bond, together with the coupons for future interest thereon, and receive in exchange therefor a registered bond without coupons, of the same issue, as provided in said mortgage or deed of trust.

This bond shall not be valid for any purpose, unless authenticated by the certificate hereon endorsed of the Trustee under said mortgage or deed of trust.

In witness whereof, said Railway Company has caused these presents to be signed by its Comptroller, or a Deputy Comptroller, and its corporate seal to be hereunto affixed and attested by its Secretary or an Assistant Secretary, and coupons with the engraved signature of its Treasurer to be attached hereto this 12th day of December, 1895.

THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY,

By

Comptroller.

Attest:

Secretary.

Form of Coupon of General Mortgage Bonds

The Atchison, Topeka and Santa Fe Railway Company will pay to the bearer, at its office or agency in the City of New York on the 1st day of April, 1896, $20 in gold coin of the United States, or its equivalent, without deduction for taxes, being six months' interest then payable on its General Mortgage Four Per Cent. 100-Year Gold bond No. .....

Treasurer.

Appendix E

Financial Statistics

SELECTED ITEMS IN COMBINED FINANCIAL STATEMENTS FOR CERTAIN GROUPS OF COMPANIES WHICH HAD BEEN REGISTERED BEFORE THE SECURITIES AND EXCHANGE COMMISSION—1937 *

(Millions of dollars)

Account	All companies (1741) †	Manufacturing companies (1034)	Merchandising companies (169)	Elect. lt., gas, heat, & water companies (74)	Extractive companies (247)
Net sales or operating revenue	$40,582	$29,626	$5,629	$ 2,935	$ 638
All costs and expenses	35,899	26,536	5,401	1,988	547
Provision for income and excess profits taxes	749	556	48	90	13
All assets	65,394	32,244	2,860	20,737	1,682
Current assets	18,913	12,853	1,533	1,184	315
Net current assets	12,914	9,648	1,168	351	193
Fixed assets (gross)	53,042	28,138	1,639	17,778	1,856
Net fixed assets	38,304	15,511	1,096	17,778‡	1,129
Long-term debt (more than one year)	13,149	2,750	212	8,194	270
Preferred stock	7,490	3,696	330	2,504	129
Common stock	18,546	12,170	891	2,916	700
Surplus and surplus reserves	14,276	9,750	884	1,698	435

* Source: Securities and Exchange Commission, *Statistics of American Listed Corporations*, 1940, Table 62.

† Only four groups of companies are included; therefore, the total of all companies is greater than that of the four industries for which figures are given in the table.

‡ No valuation reserves given.

Financial Statistics of 180 Electric and Gas Operating Utilities Which Are Subsidiaries of Registered Public-utility Holding Companies, 1945 *

Income statement items			
Operating revenue			
Electric		$ 1,923,947,843	
Gas		624,540,141	
Other		105,102,286	
Total			$ 2,653,590,270
Operating revenue deductions			
Operating expenses		$ 1,164,731,464	
Federal income taxes	$175,864,451		
Federal excess profits taxes	71,902,317		
Other taxes	224,059,535		
Total taxes		471,826,303	
Maintenance		160,210,093	
Depreciation		239,165,990	
Other revenue deductions		31,479,066	
Total operating revenue deductions			2,067,412,916
Net operating revenue			$ 586,177,354
Other income			15,338,824
Gross corporate income			$ 601,516,178
Funded debt interest		$ 150,716,739	
Other gross income deductions		77,162,292	
Total fixed charges			227,879,031
Net income			$ 373,637,147
Preferred dividend requirements			81,234,567
Balance after preferred dividend requirements			$ 292,402,580
Common stock dividends paid			194,745,940
			$ 97,656,640
Balance sheet items			
Capitalization and surplus			
Bonds		$ 3,817,100,190	
Debentures		105,203,100	
Notes and misc. noncurrent liabilities		195,684,369	
Total funded debt			$ 4,117,987,659
Preferred stock			1,419,112,701
Common stock		$ 2,308,508,368	
Capital surplus		216,967,754	
Earned surplus		574,820,571	
Total common stock and surplus			3,100,296,693
Total capitalization and surlpus			$ 8,637,397,053
Preferred dividend arrearages			$ 46,633,987
Plant, property, and equipment		$10,230,779,350	
Depreciation		2,143,359,480	
Net property			$ 8,087,419,870
Special property reserves			164,582,925
Investment and fund accounts			308,688,619
Total assets			11,860,335,875

* From "Financial Statistics for Electric and Gas Subsidiaries of Registered Public-utility Holding Companies, Year 1945," public utilities division of Securities and Exchange Commission, 1946, p. 1.

Appendix F

Business Financing

NET PUBLIC AND CORPORATE DEBT AND PRIVATE MORTGAGES, 1916-1945 *
(Millions of dollars)

Year	Federal government and agencies	State and local governments	Corporate long-term debts	Corporate short-term debts	Farm mortgages	Urban real estate mortgages—noncorporate
1916 ...	1,200	4,400	29,100	....	5,800	8,600
1920 ...	23,500	5,900	32,600	....	10,200	12,100
1929....	15,100	13,200	47,300	41,600	9,600	32,100
1930 ..	14,800	14,100	51,100	38,200	9,400	33,100
1931 ...	16,500	15,500	50,300	33,200	9,100	32,400
1932 ..	18,200	16,800	49,200	30,800	8,500	30,500
1933 ...	20,500	16,900	47,900	29,100	7,700	27,800
1934 ...	23,000	16,100	44,600	30,900	7,600	27,100
1935. ..	26,000	16,100	43,600	31,200	7,400	26,200
1936 ...	29,500	16,300	42,500	33,500	7,200	25,800
1937....	31,400	16,100	43,500	32,300	7,000	25,800
1938....	32,700	16,000	44,800	28,400	6,800	26,000
1939....	34,900	16,300	44,400	29,200	6,600	26,400
1940....	36,900	16,500	43,700	31,900	6,500	27,300
1941....	47,800	16,300	43,600	39,800	6,500	28,600
1942....	93,600	15,800	42,700	49,000	6,100	28,000
1943....	147,000	14,900	41,300	55,100	5,600	27,300
1944....	205,000	14,100	40,300	55,300	5,300	27,100
1945....	247,000	13,700	39,300	46,500	5,100	27,300

* Net debt is gross or total debts minus duplicating debt in the case of governmental units and intercorporate holdings in the case of corporations. Duplicating debts include such items as United States bonds held by federal agencies or by the United States government itself and state and local debts held by those governmental units. Intercorporate holdings refer to those corporate debts and bonds which are held by affiliated but legally distinct corporations. Data are for end of calendar years except state and local government debts, which are for June 30.

Source: Elwyn T. Bonnell, "Public and Private Debt in the United States," *Survey of Current Business*, September 1946, pp. 10-17.

NEW SECURITY ISSUES BY CORPORATIONS IN THE UNITED STATES, BY PURPOSE OF THE ISSUE AND TYPE OF SECURITY *

(Millions of dollars)

Year	For new capital				For refunding			
	Total new capital	Bonds and notes	Preferred stock	Common stock	Total refunding	Bonds and notes	Preferred stock	Common stock
1919	2,246	810	726	710	422	312	67	43
1920	2,563	1,561	462	540	225	189	21	15
1921	1,702	1,436	71	194	568	558	4	6
1922	2,215	1,645	293	277	734	684	40	11
1923	2,635	1,976	335	324	530	454	72	5
1924	3,029	2,200	318	511	402	455	28	8
1925	3,605	2,452	594	558	618	523	43	52
1926	3,754	2,667	509	578	820	687	34	99
1927	4,657	3,183	874	600	1,850	1,586	180	84
1928	5,346	2,385	1,149	1,812	1,584	1,054	248	282
1929	8,002	2,078	1,517	4,407	1,374	542	178	655
1930	4,483	2,980	412	1,091	474	451	9	14
1931	1,551	1,239	116	195	821	789	32	..
1932	325	305	10	10	319	315	.	3
1933	161	40	15	105	219	187	..	32
1934	178	144	3	31	312	312	.	..
1935	404	334	54	15	1,864	1,782	69	12
1936	1,192	839	90	262	3,387	3,187	181	20
1937	1,225	817	205	203	1,209	856	264	89
1938	873	807	48	19	1,267	1,236	31	1
1939	383	287	26	71	1,733	1,596	135	2
1940	736	601	61	74	2,026	1,834	185	8
1941	1,062	889	94	79	1,557	1,430	125	1
1942	624	506	118		418	407	11	
1943	374	282	92		685	603	82	
1944	646	422	224		2,466	2,178	288	
1945	1,264	607	657		4,937	4,281	656	
1946	3,556	2,084	1,472		2,953	2,352	601	
1947	4,716	3,498	1,218		1,517	1,236	281	

* Source: *Banking and Monetary Statistics*, Board of Governors of the Federal Reserve System, Table 137, and various current issues of the *Federal Reserve Bulletin*. In this table the term "refunding" refers to securities offered for the purpose of taking up securities already outstanding: i.e., the substitution of a new security for an old one. This includes offering of new security for exchange purposes. Issues for "new capital" include securities offered for the purpose of getting funds to build plants, acquire working capital, and for general corporate purposes. The figures were gathered by *The Commercial and Financial Chronicle*.

BUSINESS FINANCING IN 1945 AND 1946

The accompanying excerpts from the thirty-first and thirty-second annual reports of the Federal Reserve Bank of New York give a concise summary of the conditions affecting business financing in those years.

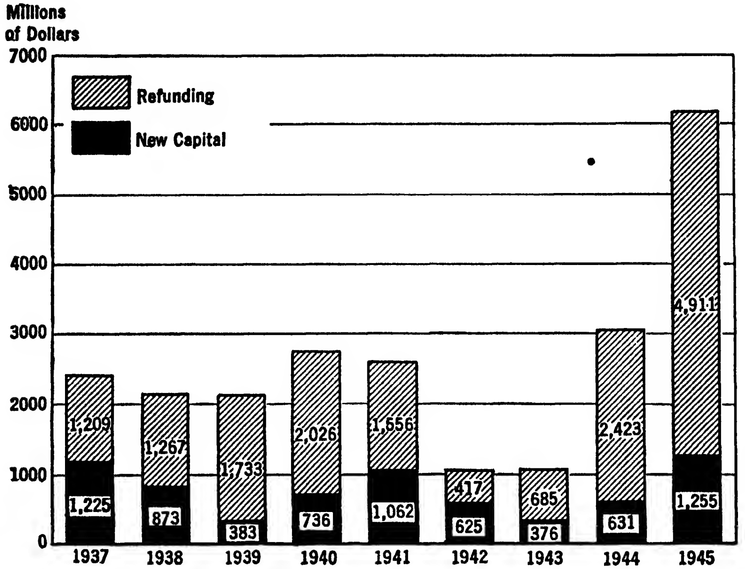
BUSINESS FINANCING (1945) *

The most striking feature of the year with respect to business financing was the extraordinary volume of refunding operations carried out by corporations to take advantage of the prevailing low interest rates. The total volume for the year amounted to nearly 5 billion dollars, and in the month of October alone was close to a billion dollars, reflecting efforts to complete refinancing operations before the Victory Loan and before the end of the year. (Flotations of corporation securities were largely suspended during War Loan drives to avoid competing with Treasury issues for investors' funds.) A factor which, in addition to the low level of interest rates, tended to stimulate refunding operations in 1945, was the scheduled expiration of the excess profits tax at the end of the year; corporations subject to the excess profits tax took advantage of their ability to retire securities which were callable only at substantial premiums and to offset the cost of the premiums and other refinancing expenses against their net income for the year, thus reducing their tax liabilities by a substantial percentage of the cost of the refinancing operations.

Prominent among the corporations engaging in large-scale refunding operations were railroads which, as a result of the improvement in their financial position growing out of the record volume of railroad traffic during the war, had improved their credit standing to the point where their securities became salable on a more favorable basis, relative to other types of securities, than for a number of years. Public utilities engaged in refunding operations on an even larger scale, and there was also a considerable volume of such operations by industrial concerns. Railroad and public utility issues took the form chiefly of bonds, whereas industrial issues included a considerable proportion of preferred stocks which also were salable on a lower yield basis than ever before.

Although refunding operations accounted for the major share in the total volume of new securities sold during the year, there was a rising trend in the volume of corporation securities sold to obtain new funds for plant construction and improvements to assist in meeting the expected heavy demands for goods and services in the postwar period. The strong stock market which prevailed during most of the year facilitated the suc-

* From "Thirty-first Annual Report of the Federal Reserve Bank of New York for the Year Ended December 31, 1945," pp. 12-13.



Annual Volume of Domestic Corporate Security Issues for Refunding and for New Capital.

cessful flotation of a number of common stock issues, but the volume, while larger than in any years since 1936, was still far short of the flotations of equity securities in the latter part of the decade of the 20's.

After the end of the war with Japan, bank loans to business borrowers other than war contractors, which had undergone a considerable shrinkage from the beginning of 1942 to the middle of 1944, began to expand, and in the latter part of 1945 showed a fairly rapid growth. Some of the loans represented, in effect, refunding operations, as the borrowers arranged term loans from banks to obtain funds with which to retire outstanding securities. In addition, however, there was a growing volume of business borrowing to finance current and planned expansion of peacetime operations. By the end of 1945 the total volume of business loans in weekly reporting member banks was at the highest level since at least 1931, and further expansion was in prospect.

Business Financing (1946) *

Financing needs of business for plant expansion and increased working capital were large during the year. While business financing through the banks and the capital markets was on the largest scale in a number of

* From "Thirty-second Annual Report of the Federal Reserve Bank of New York for the Year Ended December 31, 1946," pp. 22-24.

years (excluding refunding operations), it was not large in comparison with the capital expenditures of industry as a whole. Business enterprise in the aggregate apparently met a large part of its financial needs by drawing upon its large cash resources accumulated during the war and by using undistributed current earnings.

The increase in business borrowing from the banks during the year, amounting to at least 4 billion dollars, represented the continuation of a trend that started in the middle of 1945 and was probably greater than in any previous year. In contrast to the preceding year, when a sizable volume of term loans had been obtained from banks in order to refund outstanding securities, business demand for loans in 1946 resulted chiefly from the need to finance larger inventories and increased payrolls, a need that grew with rising commodity prices and wage rates. Business borrowing on a term basis to finance plant expansion, and short term borrowing for the same purpose pending the sale of new securities in the capital market, were also significant factors in the 1946 loan expansion. To some extent, the unsettlement in the securities markets in the latter part of the year may have resulted in bank borrowing by corporations which might otherwise have met their needs through investment banking channels.

The flotation of new money issues in the capital market amounted to 3½ billion dollars in 1946. This was almost three times the volume of 1945 and was the largest volume since 1930 according to tabulations of the *Commercial and Financial Chronicle.* Bond issues accounted for about 2 billion dollars of the total new money issues, compared with 600 million dollars in 1945. The most striking development with respect to security flotations during the year, however, was the marked expansion in public offerings of new stock issues, which had been in relatively light volume ever since 1930. Stock financing, divided evenly between common and preferred issues, came to 1½ billion dollars in 1946. The sale of new stocks was greatly stimulated by the rising trend of prices for outstanding issues, which reached its peak in May. New offerings, especially in the first part of the year, were so well received that shares sold quickly at substantial premiums above issue prices, so that profits in so-called "free rides" were large. This tended further to augment the demand for new stock issues, particularly for the more speculative securities in the low price range. The gradual recession in stock prices during the summer and the sharp declines of September and early October made this type of financing more difficult during the latter part of the year, however. There were severe breaks in prices of some of the issues floated earlier in the year, and the volume of new stock issues fell off sharply in September and October; it did not fully recover during the remainder of the year.

Although public utility corporations sold a substantially larger volume of new capital securities in 1946 than in any year since the early thirties,

issues of manufacturing companies continued to dominate the "new money" section of the investment market. In this respect, the postwar capital market more closely resembled wartime than prewar conditions. Reflecting the uncertain status of the common carriers' earning power, flotations of railroad securities for capital expansion purposes remained at the low wartime levels.

Refunding operations declined sharply in the latter part of 1946. The total volume of securities sold to refund outstanding issues amounted to less than 3 billion dollars, compared with nearly 5 billion in 1945. The opportunities for interest savings through refundings were noticeably reduced as interest rates tended to harden after April. Repeal of the excess profits tax removed a powerful incentive for refunding securities, since the proportion of the premiums required to retire old issues and other expenses of refinancing that could be offset by tax reductions was much smaller than during the war years. However, as a result of declining long term interest rates in the first quarter, and the continuing incentive of tax offsets for companies not operating on a calendar year accounting basis, the volume of refunding continued high during the first half of the year.

The price decline in the securities markets during the summer and early autumn did not prevent a continued high level in the over-all volume of security issues in the latter part of the year, but rather had the effects of changing the composition of new securities as to types and purposes, of requiring somewhat more liberal yields, and of altering the channels of distribution. The decline in stock prices made it increasingly difficult to sell equity issues for either new capital or refunding purposes; flotations of common and preferred stocks averaged about 115 million dollars a month in the last four months of the year, compared with a monthly average of 200 million in the preceding eight months. Bond offerings for refunding purposes also dropped considerably, but new bond issues sold for business expansion purposes rose sharply, reflecting in part the offering of a few very large issues. Because of the unsettled state of the market for outstanding securities, approximately one-half of the new bonds floated in the last four months of the year were placed privately with insurance companies and other large institutional investors, in contrast to about one-fourth sold in this way in the preceding months of the year.

Appendix G

Capital Stock Changes

The following statistics are typical of the changes that may occur from time to time in the capital stock of a corporation.

UNITED STATES FIDELITY AND GUARANTY COMPANY
CAPITAL STOCK CHANGES *

1896 . . . . $250,000.00
Original issue of 2,500 shares of the par value of $100.00. (2,500 shares) was sold at par. (Sec. 2, Chap. 52, Acts of the General Assembly of Maryland, 1896.)

1896-1897 . . . . $865,000.00
Increases of $250,000.00 and $365,000.00, totaling $615,000.00 (6,150 shares). The stockholders were given rights to subscribe for the new stock, pro rata upon payment of the par value of $100.00.

1898 . . . . $1,000,000.00
Increase of $135,000.00 (1,350 shares) which the stockholders were given rights to subscribe for at the par value of $100.00. This brought the capital to the maximum authorized.

1899 . . . . $1,500,000.00
By virtue of charter amendment (Sec. 15A, Chap. 188, Acts of the General Assembly of Maryland, 1898, effective April 2nd, 1898), the Company was authorized to increase its capital stock to $1,500,000.00. The additional issue of $500,000.00 (5,000 shares) was sold to the public at $140.00 per share without stockholders being given the right to participate.
(Addition to surplus account $200,000.00.)

* From Clarke J. Fitzpatrick and Elliott Buse, *Fifty Years of Suretyship and Insurance* (the story of the United States Fidelity and Guaranty Company), Baltimore, 1946, pp. 184-87.

1902 . . . . $1,650,000.00

Effective March 20th, 1902, the charter was amended by Sec. 15B, Chap. 86, Acts of the General Assembly of Maryland, 1902, to permit increase of the capital stock to $2,500,000.00 without the existing stockholders being given right to participate in the increase. Additional stock of $150,000.00 was immediately issued (1,500 shares) at par value of $100.00 per share.

1903 . . . . $1,700,000.00

Increase of $50,000.00 (500 shares) at par value of $100.00.

1909 . . . . . $2,000,000.00

Increase of $300,000.00 (3,000 shares) at $150.00 per share. (Addition to surplus account $150,000.00.)

1916 . . . . $3,000,000.00

By amendment of the charter, authorized by the stockholders on October 16th, 1916, effective October 24th, 1916, the par value of the stock was changed from $100.00 per share to $50.00 per share and the capital stock was increased to $3,000,000.00, consisting of 60,000 shares (par value $50.00). The increase of $1,000,000.00 (20,000 shares) was offered by rights to the stock holders at $75.00 per share.

(Addition to surplus account $500,000.00.)

1919 . . . . $4,500,000.00

An amendment to the charter was authorized by the stockholders on November 22nd, 1919, effective November 26th, 1919, to permit an increase of the capital to $4,500,000.00, consisting of 90,000 shares each of the par value of $50.00. The increase in the capital of $1,500,000.00 (30,000 shares) was offered to the stockholders at $100.00 per share.

(Addition to surplus account $1,500,000.00.)

1922 . . . . $5,000,000.00

By amendment of the charter, authorized by the stockholders on November 27th, 1922, effective November 29th, 1922, the capital stock was increased to $5,000,000.00, consisting of 100,000 shares, each of the par value of $50.00. The additional issue was $500,000.00, of which stockholders were given right to subscribe to 9,000 shares and employes 1,000 shares at $50.00 per share.

1926 . . . . $6,000,000.00

The charter was amended by authority of the stockholders on January 18th, 1926, effective February 1st, 1926, increasing the

capital to $10,000,000.00. Additional stock of $1,000,000.00 (20,000 shares) was offered to the stockholders at $100.00 per share.

(Addition to surplus account $1,000,000.00.)

1927 . . . . $7,500,000.00

Additional stock of $1,500,000.00 (30,000 shares) was offered to the stockholders at $75.00 per share.

(Addition to surplus account $750,000.00.)

1928 . . . . $10,000,000.00

The stockholders on October 8th, 1928, authorized the sale of 50,000 authorized but unissued shares of par value of $50.00 at $100.00 per share, increasing the capital from $7,500,000.00 to $10,000,000.00, and increasing the surplus by $2,500,000.00. At the same meeting the stockholders approved an amendment to the charter, effective December 26th, 1928, increasing the capital to $25,000,000.00 (to consist of 2,500,000 shares of the par value of $10.00). One million shares of this stock were issued in exchange for 200,000 shares of $50.00 par stock outstanding.

(Addition to surplus $2,500,000.00.)

1932 . . . . . $2,000,000.00

An amendment to the charter was authorized at a stockholders' meeting on June 6th, 1932, whereby, effective June 7th, 1932, the authorized capital stock was decreased to $5,000,000.00, each share to have a par value of $2.00. The effect was to reduce the issued and outstanding 1,000,000 shares of capital stock to $2,000,000.00. By a resolution of the stockholders $8,000,000.00 was transferred from the capital account to the surplus account.

1934 $2,800,000.00

By amendment of the charter, authorized by the stockholders on February 26th, 1934, the authorized capital stock was increased to $5,800,000.00, divided into two classes: namely, $800,000.00 of preferred capital stock, consisting of 800,000 shares, each share having a par value of $1.00, and $5,000,000.00 of common stock, divided into 2,500,000 shares, each share having a par value of $2.00 and 1,000,000 shares being outstanding. The issue of preferred stock resulted in an increase of $800,000.00 to the capital account and an addition to the surplus account of $3,200,000.00.

1936 . . . . $2,000,000.00

The preferred stock was retired, and the capital thereby reduced by $800,000.00.

1938 .... $2,000,000.00

By amendment of the charter, authorized by the stockholders on January 17th, 1938, all provisions with respect to the preferred capital stock authorized by the amendment of February 26th, 1934, were eliminated because the preferred capital stock had been retired, and the authorized capital stock was reduced to $5,000,000.00 of one class only: to wit, 2,500,000 shares of common stock, each share having a par value of $2.00, and 1,000,000 shares being outstanding. No change was made in the amount of stock issued and outstanding.

1943 . ... $10,000,000.00

At the stockholders' meeting held on October 29th, 1943, an amendment to the charter was authorized whereby the authorized capital stock was increased to $25,000,000.00, consisting of 2,500,000 shares of stock, each share having a par value of $10.00. At the same meeting the stockholders voted to transfer $8,000,000.00 from the surplus account to the capital account. The effect was to increase the issued and outstanding capital stock (1,000,000 shares) to $10,000,000.00.

During the late 1920's and particularly in the early 1930's the United States Fidelity and Guaranty Company, like others in the field, was hard hit. Its surplus dwindled away, partly because of the need of creating additional reserves for claims and for contingencies, partly because of the terrific fall in the market value of its investments.

To aid in the restoration of its surplus, the Company in 1932 by vote of the stockholders reduced the par value of its outstanding stock. In this case the par was reduced from $10 to $2 per share.

The Company in 1934 issued 800,000 shares of new preferred stock with a par value of $1 and a call price of $5. This was sold at $5 per share to the Reconstruction Finance Corporation. From this transaction the Company received $4,000,000 in cash. The stock was placed on the books at a total par value of $800,000. This left a balance of $3,200,000 to go into surplus.

Shortly after 1934, however, the skies began to brighten. Earnings and surplus began to increase. The Company was able to call and pay off the preferred stock in 1936. Finally, in 1943, it restored the par value of its common stock to $10 per share, a transaction which involved the transfer of $8,000,000 from surplus back to common stock.*

* From data found in Fitzpatrick and Buse, *op. cit.*, pp. 136-46.

CORPORATE CAPITALIZATION CHANGES, SELECTED YEARS

The differences between corporate capitalization changes in the depth of the depression in 1932 and in the postwar exuberance fourteen or fifteen years later are illustrated by the following samples from one of the financial journals of the day.

Items selected from "The New York Times Annalist," April 1, 1932

American Superpower Corporation. Stockholders will vote on a plan to reduce the stated value of preference shares from $100 to $1 each. This would add $23,283,000 to the capital surplus account. The liquidation value of the preferred shares would remain at $100. The proposed change is said to be needed to permit the company to continue to pay dividends under the provisions of the Delaware law which forbids a company to declare and pay dividends unless the net assets are in excess of the aggregate stated value of stocks having a preference upon distribution of assets.

American Woolen Company. Stockholders approved a plan to change the par value of its stock from $100 a share to no par. The proposal has the purpose of wiping out a book deficit resulting from an adjustment of plant account.

Barnsdall Corporation. Stockholders approved a reduction in par value of capital stock from $25 a share to $5. The adjustment will transfer capital into surplus and will permit the company to carry all oil and gas leases at $1. Future earnings will not carry charge for depletion and property adjustment. The amount of $45,175,850 will be transferred into surplus.

Electric Bond and Share Company. Issue of 1 common for 3 common outstanding and the assignment of a $5 par to the new stock instead of no par was approved.

Items selected from "Barron's," March 11, 1946

Barker Bros. Directors proposed splitting present no-par shares into no-par stock on 2 for 1 basis.

Briggs and Stratton. Stockholders will vote on proposal to split capital stock 2 for 1.

Century Ribbon Mills. Stockholders will be asked at annual meeting to vote on a proposal to split the shares 2 for 1.

National Radiator Company. Stockholders will be asked to approve a split of the common stock 2.5 shares for 1.

Missouri Kansas Texas Railroad Company. The Railroad is intending to submit to the stockholders a recapitalization plan this year which will include the issuance of additional preferred shares to cover back dividends on the stock.

From an article, Stock Split-ups of an Active Year [1947], in "The Exchange," a monthly publication of the New York Stock Exchange, January 1948.

The movement to enlarge the number of outstanding shares, which began to gather momentum in 1944, remains under noticeable headway. Stocks listed on the New York Stock Exchange to be split in a ratio of 2 to 1 or more numbered [48] in 1947.

As the eye runs through the roster [of split-ups], particular issues may be detected which would appear to be aiming toward a wider "popularization." . . .

Some previously closely-held "family" corporations (the listing of such stocks has been a feature of the market during the last three years) were split in ratio of 10 for 1, or even greater, before the owners elected to list the stocks. . . . Again, splits, with their concomitant enlarged public interest, act to aid the marketing of additional capital issues should a corporate need arise.

The single counterbalance to split-ups [among stocks listed on the Exchange] was a "split-down" in case of Equitable Office Building Corporation, . . . one share taking the place of five shares of capital stock.

Appendix H

The Reorganization of the Chicago, Indianapolis, and Louisville Railway Company (The Monon Route *), Approved in 1946, in Full Effect, 1947 †

This company was incorporated in Indiana in 1897 as the successor to several defunct railway companies. The railway is the result of consolidations and mergers, as well as the construction of properties begun in 1847. The system, accordingly, celebrated its centennial in 1947. The company operates a steam railroad in Illinois, Indiana, and Kentucky, the main lines extending from Chicago to Indianapolis and from Chicago to Louisville. The company also owns and operates several branch lines. The trackage actually owned by the company is located entirely within the state of Indiana. The company's operations are carried on from the respective state lines to Chicago and to Louisville by means of leases or other trackage arrangements with other carriers, in which the company owns an interest. The company has a one-third interest in the Kentucky and Indiana Terminal Railroad Company at Louisville, a one-fifth interest in the Chicago and Western Indiana Terminal Railroad Company, and a one-thirteenth interest in the Belt Railway Company of Chicago. It also has several subsidiaries.

* According to a statement attributed to George Ade, the word "Monon" is Indian for "swift-running."

† The data in this summary of the Monon reorganization plan have been taken mainly from the Interstate Commerce Commission's, "Chicago, Indianapolis, and Louisville Railway Company Reorganization," Finance Docket No. 10294 (September 1945), and from the order of Federal Judge Michael L. Igoe vesting the debtor's property in the reorganized company and authorizing and directing consummation of the plan of reorganization (District Court of the United States of Northern District of Illinois, Eastern Division, No. 54761, April 24, 1946).

In 1902 the Louisville and Nashville and the Southern Railways jointly acquired control of the Monon through ownership of 77 percent of the preferred stock and 93 percent of its common stock, thus acquiring access to Chicago and the Northwest.

Prior to the reorganization proceedings the company's capitalization was as follows:

Name of issue	Amount	Annual interest requirements on bonds	Principal plus unpaid interest to January 1, 1943
Equipment trust	$ 70,000*	....	$ 70,000*
C. I. & L. refunding mortgage 6s due 1947	4,700,000	$ 282,000	7,379,000
C. I. & L. refunding mortgage 5s due 1947	4,998,000	249,900	7,372,050
C. I. & L. refunding mortgage 4s due 1947	5,300,000	212,000	7,314,000
Indianapolis & Louisville first mortgage 4s due 1956	1,172,000	46,880	1,617,360
C. I. & L. first & general mortgage 5s due 1966	5,909,000	295,450	8,617,291
C. I. & L. first & general mortgage 6s due 1966	3,992,000	239,520	6,267,440
Railroad Credit Corporation	1,572,755		1,707,634
Chase National Bank	741,400		1,151,073
Due on note to Louisville & Nashville	133,940		193,687
Due on notes to Louisville & Nashville and to Southern	1,170,360		1,806,711
Unsecured claims—estimated	500,000		500,000
Preferred stock	4,991,300		4,991,300
Common stock	10,497,000		10,497,000
Totals	$45,747,755	$1,325,750	$59,484,546

* The equipment trust obligations had matured and had been paid before the reorganization plan went into effect.

The security behind the C. I. & L. refunding-mortgage bonds in three series, the 6s, the 5s, and the 4s, all due in 1947, consisted

of a first mortgage on 497 miles of line. This comprised all the road owned by the company except a 65-mile branch line from Wallace Junction to Midland and 9 miles from Harrodsburg to Clear Creek. On these small pieces of road the refunding-mortgage bonds had a second lien. On the 65 miles from Wallace Junction to Midland, the Indianapolis and Louisville first mortgage 4s of 1956 had prior rights, while on the 9 miles from Harrodsburg to Clear Creek the Indiana Stone mortgage bonds of 1948 had a first lien.* These latter bonds were, however, owned by the company and not publicly held. The refunding-mortgage bonds also had a first lien on various units of equipment and on certain stock which the company owned in other companies.

The security behind the C. I. & L. first and general mortgage 5s and 6s due in 1966 was a second mortgage on the same lines on which the refunding-mortgage bonds had a first mortgage. These bonds had a third lien on the branch lines from Wallace Junction to Midland and from Harrodsburg to Clear Creek. The C. I. & L. first and general mortgage bonds had a first collateral lien, however, on the line from Harrodsburg to Clear Creek, the company having deposited the Indiana Stone Railroad first gold 5s due in 1948 on this section of road in trust as security for the C. I. & L. first and general bonds. Some of the bonds issued under the Indianapolis & Louisville first mortgage were also deposited with the indenture trustee as collateral for the first and general mortgage bonds. The first and general bonds also had a first lien on certain pieces of equipment.

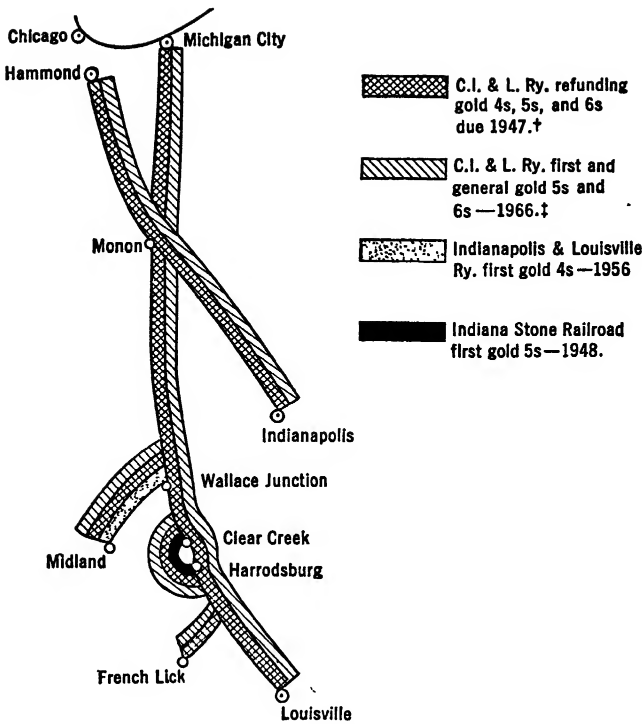
The equipment trust notes were secured by lease on certain locomotives, the certificates maturing to the amount of $35,000 each year. These equipment securities were paid out before the reorganization plan went into effect.

The notes due to the Railroad Credit Corporation and to the Chase National Bank were secured by a pledge of the C. I. & L. first and general mortgage bonds of a par value of $4,491,000.

The diagram on the following page shows the nature of the lien for each of the bond issues.

The interest charges on the long-term bonds, not including those on the equipment trust notes, totaled $1,325,750. The interest had

* In 1916 the C. I. & L. had purchased the assets, heretofore leased, of Indiana Stone Railroad and of the Indianapolis and Louisville. The bonds of these companies were assumed by the purchasing company, remaining a first mortgage on these properties.



Security Behind Bond Issues of the Monon Prior to Reorganization.*

* Based on information found in Interstate Commerce Commission Finance Docket No. 10294.

† Further secured by certain leaseholds, stocks of other companies, and equipment.

‡ Further secured by certain bonds and stocks of other companies and equipment.

not been paid on most of the bonds since 1934. We shall now consider the reasons for and background of these defaults.

For a number of years the company earned a fairly large income, kept up the interst, and paid some dividends. From 1922 to 1929 the operating revenues were generally above $17,000,000, and in four of the years they were above $18,000,000. The amount available for the payment of interest during this period remained in the neighborhood of $2,500,000. This furnished a fair, but not excellent, coverage on the bonds.

After 1929, however, the revenues began to decline. The fact that the road is a heavy coal carrier added to its vulnerability in the depression which began about 1930. The road's dependence upon

other companies put it in a poor position when interrailroad rivalry for traffic became keen. The comparatively short runs of its passenger trains made the company particularly vulnerable to truck and bus and private automobile competition.

The income available for interest fell drastically from 1929 to 1932, with some improvement after 1933. From 1930 to 1934 the average income, before interest, was $322,834. The average annual income available for interest from 1930 to 1941 was $537,262 and for 1932 to 1938 it was $87,538. From 1938 to 1941 the available income for interest was $917,871 per year. Under these circumstances the company was not able to pay its interest, to say nothing of its maturing current obligations. It made frequent loans from various lending agencies: the working-capital position became very poor; equipment was badly deteriorated and inefficient; the company was in serious financial difficulties.

Faced with this situation, the Chicago, Indianapolis, and Louisville Railway Company in 1933 filed a petition in the Federal District Court in Chicago, alleging that it was unable to pay its debts as they fell due and stating that it wanted to arrange a plan of reorganization under Section 77 of the Bankruptcy Law relating to railroads. The Court approved the petition and directed the debtor to remain in possession of the road for the time being. In 1936 a trustee was appointed to control and operate the road.

As is usual in a reorganization of this kind, committees representing prior groups of security holders went to work, and plans of reorganization were offered by these committees as well as by the debtor. At first, because the extremely bad earnings beclouded any forecast for the future, the Interstate Commerce Commission rejected the plans. Finally in 1944 the Commission issued and approved a plan on which the Federal District Court held hearings. With certain changes the plan of reorganization was approved by the Court in 1946. The property of the road, with certain leases and contracts to be kept alive, was in April 1946 turned over to the old existing company with an amended charter. It was not turned over to a new company as is often the case. Voting trustees for the new stock were appointed, and in January 1947 the proceedings were formally declared at an end. The company had been reorganized.

In the preparation of a plan of reorganization for the Chicago, Indianapolis, and Louisville Railway two questions arose:

1. What is the value of the company's business or property—that is, what is the value of the investment?

2. How should this value be distributed among the security holders?

1. *The value of the property or investment.* The original cost, except land, was some $38,000,000; the cost of reproduction new was $47,000,000; the cost of reproduction less depreciation was almost $29,000,000. In addition the company had net working capital of about $500,000 and land valued at $3,000,000, making a total value on the reproduction basis of about $32,500,000. In the determination of the value for purpose of reorganization, however, neither the original cost nor the cost of reproduction was controlling. These might limit or modify the capitalization, but the positive and determining element was the earning capacity of the corporation.*

The Interstate Commerce Commission and the Federal Court had some difficulty in ascertaining the probable future earning capacity for purposes of capitalization. The earnings were comparatively favorable during the early and middle 1920's and unfavorable in the late '20's and in the early and middle '30's. Then about 1939 they began to rise and were fairly large during the war years. The Commission did not wish to use the expanded and unrealistic war figures as a base. On the other hand, it believed that the earnings in the early and middle 1930's were clearly below those that could be anticipated in the future. For various reasons, including the fact that the company had put into effect certain operating efficiencies in that year, the Commission selected 1940 as representative of the probable earning capacity of the company. The operating ratio in that year was 69, and the income available for interest was $1,408,791. Capitalized at 4.5 percent this gave a probable value slightly in excess of $31,000,000.

With all these figures in mind, then, the Interstate Commerce Commission (whose estimates were approved by the Court) concluded that the capitalization—that is, the par value of the stocks and bonds of the reorganized company—should be approximately $30,000,000.†

* It must be carefully kept in mind that we are here discussing the fixing of a value for the purpose of reorganization, not for the fixing of reasonable rates. Earning capacity cannot be used as a basis for determining the value of the investment for rate-making purposes.

† If the stock had no par the stated-value figure was to be used in the computation.

2. *How should this value be distributed?* In answering this question, the Commission was bound by a requirement of the law that the plan be fair and equitable and also workable and compatible with the public interest.

The Interstate Commerce Commission then investigated in detail the basic nature and right of the old mortgages and the allocation of earnings among the various groups of security holders. As we have seen, there were two active first mortgages: the refunding mortgage on almost all of the line owned by the company, and the Indianapolis and Louisville mortgage on a branch from Wallace Junction. The Commission went to great length in analyzing the relative value of these, attempting to allocate the amount of earnings attributable to each section of the line.

The Commission found, for instance, that the traffic feeding the line from Wallace Junction to Midland had been steadier than the general traffic of the company. On the other hand, the value per mile of the entire property on which the refunding-mortgage bonds had a first lien was greater than the value per mile of the assets behind the Indianapolis and Louisville mortgage bonds. After listening to protests and arguments from all parties, the Commission decided that these arguments tended to offset each other and that the Indianapolis and Louisville 4s should be placed in about the same class as the refunding mortgage 4s so far as safety and earnings were concerned. Naturally the refunding 5s and 6s, carrying a higher interest rate with the same security, received a little better treatment than the refunding 4s.

The Chicago, Indianapolis, and Louisville first and general mortgage bonds, as noted, had a second mortgage on the same property that furnished the first lien of the refunding mortgage. The fact that the Indiana Stone first-mortgage bonds had been pledged as collateral for these first- and general-mortgage bonds did give them, however, an indirect first lien on the Harrodsburg to Clear Creek stretch of 9 miles, which constituted a fairly profitable section of line. The Interstate Commerce Commission concluded that, though the holders of the first- and general-mortgage bonds should receive some consideration because of this special backing, their bonds, which were really second mortgage on most of the line, were fundamentally weaker than the refunding issues and would have to make greater sacrifices.

The equipment-trust obligations, amounting to $70,000 on Decem-

ber 31, 1942, $35,000 being due on October 1, 1943, and $35,000 on October 1, 1944, were left undisturbed. These, as already pointed out, were paid off before the plan went into effect. In its appraisal of the various properties, the Interstate Commerce Commission found that the net value—that is, the value after depreciation—of the equipment on which these equipment-trust obligations were based was at least sixteen times the amount of the indebtedness. Moreover—and this was a powerful argument—had the plan not allowed these obligations to be paid, the trustee representing the holders could have demanded possession of the specific equipment and could have taken it away, a development which would have been disastrous to the railroad.

When we recall that the company's capitalization and unpaid interest amounted to more than $59,000,000 and then compare this figure with the total value of the property, which was set at only some $31,000,000, it becomes clear that some of the outstanding debts and securities had no value at all. The preferred stock and common stockholders were denied any participation in the plan, which is a euphonious way of saying that their shares were canceled. The notes due to the Louisville and Nashville individually and to the Nashville and the Southern jointly were also canceled. The same fate befell many of the claims of the other general and unsecured creditors except for certain debts incurred in the ordinary course of business and any obligations incurred during the bankruptcy proceedings. These specially favored claims were settled.

The debts due to the Railroad Credit Corporation and to the Chase National Bank had been backed by pledges of bonds which were recognized. They were, accordingly, allowed to share in the reorganization.

Considerable discussion took place as to whether the Louisville and Nashville and the Southern railways should be allowed any participation because of their holdings of preferred and common stock. Since these stocks were at the bottom of the line in priority, there seemed to be nothing for them, but the suggestion was made that they be given rights to purchase new stock at a special price in exchange for their cooperation in making traffic agreements and sending business in the direction of the Monon. It was believed, however, that a special price to these railways for stock of the Monon would violate the absolute priority rule in that a special purchase rate would thin out the priority and shares given the

bondholders. If these railroad companies wanted stock in the reorganized company they would have to pay for it in valuable "balance sheet assets."

The new securities issued were of four kinds:

1. Chicago, Indianapolis, and Louisville Railway first mortgage 4-percent cumulative income bonds, due Jan. 1, 1983, requiring interest to be paid only if earned.

2. Chicago, Indianapolis, and Louisville second mortgage 4.5-percent cumulative income bonds, due January 1, 2003, requiring interest to be paid only if earned.

3. Class A common stock of par value of $25. This is really a preferred stock which carries a dividend rate of $1.25. It is participating.

4. Class B common stock of no-par value, stated value $25 per share. Class A and B common stock have one vote per share, but may vote separately for directors, the Class B stock electing one third, or, since the total number is eleven, four, of the directors.

The rates at which the new securities were given in return for each $1000 principal amount of bonds, with all defaulted coupons since 1934 attached, are as shown on following page.

The distribution of the securities and the amount will be as shown on page 627.

It will be noted that the first and general bonds were allowed to share with the refunding bonds and the Indianapolis and Louisville first mortgage. Since the first and general are second mortgage, why were they allowed to share to some extent equally with the refunding mortgage bonds which are prior to them on the whole road? Why should they also be allowed to have some degree of equality with the Indianapolis and Louisville first mortgage? Doesn't this violate the absolute priority rule which clearly states that a security issue must maintain its full priority? The answer to this is found in the fact that though the first and general bonds are mainly a second mortgage, they do have certain first-lien rights. They are backed, for instance, by a pledge of the Indiana Stone first-mortgage bonds and by a certain quantity of Indianapolis and Louisville first-mortgage bonds. For this reason, therefore, the first and general mortgage bonds were given a participation, though it was small, on an equal basis with the bond issues which are considered as having the prior lien.

Outstanding bonds	New securities to be delivered			
	First mortgage	Second mortgage	Class A, $25-par shares *	Class B no-par shares, stated value $25 *
Refunding mortgage 6-percent bonds..........	$463.00	$575.00	21.28	
Refunding mortgage 5-percent bonds......................	435.00	540.00	20.00	
Refunding mortgage 4-percent bonds..........	407.00	505.00	18.72	
Indianapolis & Louisville 4-percent bonds.................	404.00	507.00	18.76	
First and general mortgage 5-percent bonds..................	42.13	16.13	1.50	13
First and general mortgage 6-percent bonds..................	45.36	17.37	1.6148	14

* The figures for Class A and Class B stock are number of shares. The par value of the Class A shares given for a $1000 par refunding mortgage 6-percent bond is 21.28 × $25 = $532.00. Since the new stock is to be temporarily in the hands of voting trustees, the stockholders will be given trust certificates for their shares. These certificates will be salable on the market.

The reorganization plan as adopted accomplished the following results:

1. It reduced the long-term capitalization (stocks and bonds) from about $41,559,000 to $30,014,791.

2. It reduced the fixed interest charge from approximately $1,500,000 per year to practically none.* Contingent charges of $705,704 interest on the new income-mortgage bonds were substituted for required interest. Annual installments of $100,000 to a sinking fund and $200,000 annual additions to a betterment and improvement fund must be made. The company retains certain obligations with respect to necessary rentals and contracts for the use of certain

* The fixed charges were made up mainly of the interest payments but there were some other required payments.

Present securities				Obligations of reorganized company under plan *				
Name of issue	Amount	Annual interest	Principal, plus interest to Jan. 1, 1943	Undisturbed	First-mortgage income 4% bonds	Second-mortgage income 4.5% bonds	Class A cumulative, $25 par	Class B no par, stated value $25
Equipment trust	$ 70,000	. .	$ 70,000	$70,000	....	......	.....	....
Refunding 6s	4,700,000	$ 282,000	7,379,000	. . .	$2,176,100	$2,702,500	$2,500,400	....
Refunding 5s	4,998,000	249,900	7,372,050	. .	2,174,130	2,698,920	2,499,000	....
Refunding 4s	5,300,000	212,000	7,314,000	.	2,157,100	2,676,500	2,480,400	....
I. & L. 4s	1,172,000	46,880	1,617,360	. . . .	473,488	594,204	549,668	....
1st & Gen. 5s	5,909,000	295,450	8,617,291	.	248,946	95,312	221,587	$1,920,425
1st & Gen. 6s	3,992,000	239,520	6,267,440	. .	181,077	69,341	161,157	1,397,200
R.R. Credit Corp.	1,572,755	....	1,707,634	.	90,856	34,792	80,861	711,050
Chase Nat'l Bank	741,400	......	1,151,073	.	112,103	42,927	99,772	864,975
L & N Note	133,940	....	193,687	.	. ....	....	... ...	....
Notes to L & N and Southern	1,170,360	......	1,806,711	. ..	. .... .	.. .	...	....
Unsecured claims	500,000†	......	500,000*	. ..	. . ..	... .	. ....	....
Preferred stock	4,991,300	....	4,991,300	. ...	....	.....	. ...	....
Common stock	10,497,000	.... .	10,497,000	.	..	. ..	.	. .....
Total	$45,747,755	$1,325,750	$59,484,546	$70,000	$7,613,800	$8,914,496	$8,592,845	$4,893,650

* Total capitalization, $30,084,791.

† Estimated.

facilities, rights of way, and terminals. These will total about $162,000 per year.

3. It materially reduced the company's total current debts and obligations, completely eliminating many of them.

4. It provides for three trustees who are to have full voting power of the Class A and Class B stock trusteed to them. The duration of this trust is specifically limited. This provision takes control of the corporation for the time being out of the hands of the old security holders.

5. It makes limited provisions for raising new capital. The company may issue additional equipment-trust certificates for the purchase of new locomotives and cars. There is some hope that the Southern and the Louisville and Nashville companies will be interested in obtaining new stock either by means of cash payments or by the granting of various valuable traffic privileges and concessions.*

A rather unusual feature of the reorganization plan as consummated is the fact that the new first-mortgage income bonds are the senior security. While interest on these and the second-mortgage income bonds does not have to be paid unless earned, it may be paid even if not earned. Though the company incurred a loss during the first period of operation under the new capital structure, it nevertheless paid the interest on the bonds.

* See "Aspirin for a Hoosier Headache," *Business Week,* March 29, 1947, p. 18, for brief account of the work of the new president, John W. Barriger, in getting this road back on its feet.

Appendix I

Profits, Dividends, and Internal Financing

NET PROFITS EARNED AND DIVIDENDS PAID BY VARIOUS GROUPS OF COMPANIES *

(Millions of dollars)

Year	Industrial companies (152 companies)		Railroads, Class I (about 95 percent of all railroad operations)		Electric power (about 95 percent of all companies)		All corporations	
	Net profits	Dividend	Net income	Dividends	Net income	Dividends	Net corporate profits	Dividends
1939	847	654	93	126	535	444	5,005	3,796
1940	1,028	759	189	159	548	447	6,447	4,049
1941	1,137	797	500	186	527	437	9,386	4,465
1942	888	640	902	202	490	408	9,433	4,297
1943	902	642	873	217	502	410	10,363	4,477
1944	970	697	667	246	507	398	9,928	4,689
1945	989	697	450	246	534	407	8,939	4,765
1946	1,139	739	289	235	645	454	12,539	5,614

* Source: Various issues of *Federal Reserve Bulletin*. Net profits and net income for the group of companies are before dividends and after all costs, expenses, interest, and other fixed charges and after all taxes. Figures for "All corporations" are from statistics on Gross National Product, National Income, and Income Payments, Department of Commerce estimates, and were taken from a recently revised series as found in "National Income supplement" to *Survey of Current Business*, July 1947. These net corporate profits figures are on the national income basis.

CORPORATE FUNDS DERIVED FROM OPERATIONS AND AVAILABLE FOR CAPITAL FORMATION, 1926-1935 *

(Millions of dollars)

Year	Depreciation and depletion, all corporations	Corporate savings	Funds available for capital formation †
1926	3,800	1,200	5,000
1927	3,800	300	4,100
1928	4,100	1,400	5,500
1929	4,400	1,400	5,800
1930	4,400	−3,900	500
1931	4,300	−5,900	−1,600
1932	3,900	−6,400	−2,500
1933	3,700	−2,800	900
1934	3,700	−2,100	1,600
1935	3,700	−1,200	2,500

* Source: *Structure of the American Economy*, National Resources Committee, 1939, p. 383.

† Depreciation and depletion plus corporate savings.

Appendix J

An Illustration of a Stock Right

The issuance of stock rights is a rather frequent occurrence. If you look in the stock quotation pages of the daily newspaper, you may find the abbreviation "rts" below certain quotations. In some newspapers, the quoted values of any rights are listed at the end of the stock table. Two or three such rights are about the most that one will find quoted on any one day.

For illustrative purposes, we have selected a right issued by the Boeing Airplane Company in 1940. As a preliminary to the issuance of such rights, the company asked the stockholders to approve an amendment to the charter to increase the authorized capital stock from 800,000 shares to 1,250,000 shares, par value $5. After the stockholders had approved this proposal, the company announced that the stockholders of record on May 10, 1940, were given the right to subscribe for new additional stock at $16 per share in the ratio of one new share for each two held. The rights were to expire on May 24.

The company had these rights underwritten by a group of investment bankers. The syndicate agreed to purchase at $16 per share any stock offered to the stockholders but not taken. The increase in the number of shares was to be 360,979, which was the amount required to increase the total shares outstanding by 50 percent. The warrants were to be freely transferable.

The quotations for the rights, as given in the accompanying table, followed the theoretical values rather closely. Incidentally, the rapid rise in the price of the stock on May 16 was to a large extent due to an announcement by the president of the company that definite plans had been made for an aggressive expansion program. The rapid decline immediately thereafter was a reflection of the probability that the "good news" had been discounted by the market. When a favorable announcement has been anticipated or expected, the market

price of the shares will sometimes tend to fall after the breaking of the news. About three fourths of the shares offered were purchased by the stockholders or by those who had procured the rights on the market. The balance of some 88,000 shares was "taken up" by the underwriters.

MARKET PRICES OF COMMON STOCK AND OF RIGHTS, TOGETHER WITH THE THEORETICAL VALUE OF SUCH RIGHTS, BOEING AIRPLANE COMPANY, 1940

Date	Closing price of stock	Closing price of right	Theoretical value of right
May 7	$23\frac{1}{4}$	$2\frac{1}{2}$	2.42
May 8	$24\frac{1}{8}$	$2\frac{5}{8}$	2.71
May 9	$22\frac{1}{8}$ *	3	3.06
May 10	$22\frac{1}{2}$	$3\frac{1}{8}$	3.25
May 11	$23\frac{1}{2}$	$3\frac{3}{4}$	3.75
May 13	$21\frac{1}{4}$	$2\frac{5}{8}$	2.63
May 14	20	2	2.00
May 15	$19\frac{3}{4}$	$1\frac{7}{8}$	1.88
May 16	$23\frac{1}{8}$	$3\frac{5}{8}$	3.56
May 17	$20\frac{7}{8}$	$2\frac{1}{4}$	2.44
May 18	$20\frac{1}{2}$	$2\frac{1}{4}$	2.25
May 20	21	$2\frac{3}{8}$	2.50
May 21	$17\frac{5}{8}$	$\frac{15}{16}$	.813
May 22	$17\frac{1}{2}$	$\frac{11}{16}$	.75
May 23	$16\frac{1}{2}$	$\frac{1}{4}$cash †	.25
May 24	16	warrants expired	

* Ex rights.
† A cash transaction is one on which delivery has to be made the same day.

Appendix K

The Merger of Tubize Rayon Corporation into Celanese Corporation of America

The reasons for the merger of Celanese and Tubize were summarized by *Barron's* * as follows:

Celanese is one of the three largest producers in the rayon field and is by far the largest producer of the cellulose acetate type, making about half of all produced in the country.

Tubize is one of the second string producers in point of size and makes both the acetate and viscose type. It is also one of the largest knitters of rayon for underwear and lingerie.

Celanese wants Tubize for several reasons. In the first place, it wants a piece of the important tire cord market and to do this it must make viscose type rayon which stands heat better than the acetate type. By acquiring Tubize it can enter this field without adding to the over-all capacity of the country. It also would like Tubize knitting facilities to add to its own already profitable operations in this department of the industry.

Celanese has a number of advantages to offer. In the first place, it has the advantage of size which may be important in an industry likely to become more and more competitive as time goes by. In the second place, Celanese offers diversification in the chemical field and the companion advantage of probably lower priced raw materials. In the past few years Celanese has developed an important chemical business with a number of exclusive low cost processes. It is now completing a major new chemical plant in Texas to make a variety of chemicals from petroleum as a raw material. Some of these will be rayon raw materials—acetic acid, for example—and others will be for plastic or for general chemical use. Sale of these may reduce the basic cost of the rayon material.

The chief aim of the rayon industry at present is to get its costs down, especially on acetate, and by making its own raw materials Celanese might get an edge on some of its competitors.

* December 3, 1945, p. 1.

Tubize produced yarns mainly by the viscose process, while Celanese relied on the cellulose-acetate method. Many important textiles used in this country are a mixture of these yarns. The natural result was a combination of these companies.

The combination was actively encouraged by Kidder, Peabody & Co., an investment banking firm, and in November 1945 the directors of both companies agreed on a plan of merger which was approved by the stockholders of each organization early in 1946. In deciding on the basis of consolidation, the negotiators placed emphasis upon figures such as these.*

	Celanese Corporation of America	Tubize Rayon Corporation
Earnings per share of common stock, 1944	\$2.86	\$1.22
Earnings per share of common stock, 1943	\$2.83	\$1.53
Common stock equity, 1944	\$33,340,095.00	\$10,736,652.00
Number of common shares	1,579,448	702,866
Book value of common stock per share	\$21.10*	\$15.27†
Prices of common stock on market some months before arrangements were definite	\$53.00	\$30.00

* The common stock equity of Celanese was common stock stated value \$1,579,448, capital surplus \$14,877,669, earned surplus \$14,382,978, reserve for contingencies \$2,500,000. There were 1,579,448 shares of common stock. Thus

$$\frac{\$1{,}579{,}448 + \$14{,}877{,}669 + \$14{,}382{,}978 + \$2{,}500{,}000}{1{,}579{,}448} =$$

$$\frac{33{,}340{,}095}{1{,}579{,}448} = \$21.10 = \text{Book value of a share of common stock.}$$

The patents of Celanese were valued at \$1, though there were some research and experimental expenses which had been capitalized as assets.

† The common stock equity of Tubize included \$1 par common stock \$702,866, capital surplus \$4,869,375, earned surplus \$4,341,465, reserves for contingencies \$822,946. Goodwill was \$1. The number of shares of common stock was 702,866.

It will be noted that a ratio between the two companies in the vicinity of 2 to 3 or 3 to 5 seems to be prevalent. The book value

* We have given them only for a year or two. The actual negotiations, of course, included the analysis of the trend over a period of years.

of a share of Tubize common stock was a little more than two thirds that of Celanese common. The earnings per share of common stock of Tubize were around one half to three fifths as large as those of Celanese, though the long-time record of Tubize was less steady. The market prices of Tubize were almost three fifths as high as those of Celanese.

The two companies also had preferred stock outstanding, which was considered of approximately the same strength. The Tubize preferred stock had a par of $100 with a dividend rate of 4.75 percent. Celanese had a no-par preferred outstanding which carried a dividend rate of $4.75.

The merger plan which resulted from the negotiations was as follows:

1. Tubize to be *merged into* Celanese, Tubize to lose its identity while Celanese was to remain unchanged.

2. Each share of Tubize $100-par value 4.75-percent preferred stock to be exchanged for one share of Celanese no-par value first preferred stock $4.75 series.

3. Each share of Tubize $1 par common stock to be exchanged for ⅔ of a share of Celanese no-par value common.

4. Celanese Corporation of America to increase its capitalization sufficiently to take care of these exchanges.

It will be noted that the stockholders of Celanese are to make no exchange.

Appendix L

Yields on Various Forms of Securities, 1929-1947 *
(in percent per annum—average of monthly figures in each year)

Year	Long-term U. S. Treasury bonds (partially tax exempt)	Municipal bonds (20 bonds)	Railroad bonds (40 bonds)	Industrial bonds (40 bonds)	Public utility bonds (40 bonds)	Common stocks (200 stocks)
1929...	3.60	4.31	5.18	5.31	5.14	3.5 †
1930...	3.29	4.12	4.96	5.25	5.05	4.6
1931...	3.34	4.07	6.09	6.08	5.27	6.2
1932...	3.68	4.77	7.61	6.71	6.30	7.4
1933...	3.31	5.14	6.09	5.34	6.25	4.4
1934...	3.12	4.22	4.96	4.52	5.40	4.1
1935...	2.79	3.38	4.95	4.02	4.43	4.1
1936...	2.69	2.93	4.24	3.50	3.88	3.5
1937...	2.74	3.03	4.34	3.55	3.93	4.8
1938...	2.61	2.99	5.21	3.50	3.87	4.4
1939...	2.41	2.82	4.53	3.30	3.48	4.2
1940...	2.26	2.52	4.30	3.10	3.25	5.3
1941...	2.05	2.15	3.95	2.95	3.11	6.2
1942...	2.09	2.25	3.96	2.96	3.11	6.6
1943...	1.98	1.90	3.64	2.85	2.99	4.8
1944...	1.92	1.64	3.39	2.80	2.97	4.7
1945...	1.67	1.49	3.06	2.68	2.89	4.1
1946...	....	1.51	2.91	2.60	2.71	3.9
1947 ‡..	....	1.90§	3.11	2.67	2.78	5.05

* Source: *Survey of Current Business*, *Federal Reserve Bulletin*, and *Statistical Abstract of the United States*. These figures, in turn, are obtained from the following: Municipal bonds from *Bond Buyer*, corporate bonds and common stocks from *Moody's Investors Service*, long-term U. S. bonds from Treasury Department.

† The yield on common stocks was computed by dividing the aggregate annual dividends being paid at the end of each month by the market value of all outstanding shares of the companies. The 1929 figure is the average of the data from June to December.

‡ No partially tax-exempt long-term bonds in 1946 and 1947. The yield on taxable long-term U. S. government bonds in 1947 averaged 2.25 compared with 2.19 in 1946 and 2.48 in 1944.

§ Average for January to October inclusive.

Extracts from Irwin Friend, "Business Financing in the Postwar Period," *Survey of Current Business*, March 1948, p. 15.

These factors [the great increase in the supply of liquid assets, increased demand especially by insurance companies for new fixed-interest investments, and the policy of the United States government and the Federal Reserve banks in supporting the prices of United States bonds] help to explain not only the low level of bond yields and interest rates but, to some extent, at least, the widening spread between the cost of financing in equity securities versus fixed-interest-bearing obligations. Corporate bonds are currently selling at an average yield of slightly more than 3 percent compared with a dividend yield well over 5 percent on common stocks. . . . In 1929, in contrast, the interest rate which borrowers had to pay was above the dividend yield. . . . In the mid-1920's, the interest rate was approximately equal to the dividend yield.

Other reasons for the relative weakness of the stock market as compared with the bond market may be found in the complex of factors affecting investors' confidence in the short run, in possible long-run changes in attitude toward the assumption of risk as a result of developments in our economy, and probably also in the higher rates and increased progressiveness in the tax structure as compared with the 1920's. . . . However, regardless of shifts in investor psychology, so long as business can obtain borrowed funds at the present low rates (incidentally without incurring a tax liability on interest charges unlike the double taxation on dividends), it seems probable that, for some time at least, a high proportion of capital requirements will continue to be satisfied through fixed-interest-bearing obligations.

Appendix M

INVESTMENTS OF 49 UNITED STATES LEGAL RESERVE

Dec. 31	Farm mortgages		Other mortgages		U. S. government bonds		State, county, municipal bonds		Canadian government bonds		Other foreign bonds	
	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent †
1906	262	9.1	547	19.1	3	.1	104	3.6	22	.8	65	2.3
1911	483	12	814	20.2	1	0	170	4.2	22	.6	81	2.0
1916	789	14.8	983	18.5	2	0	241	4.5	70	1.3	139	2.6
1920	1,128	16.3	1,114	16.0	797	11.5	288	4.1	144	2.1	101	1.5
1921	1,321	17.7	1,242	16.6	800	10.7	347	4.7	157	2.1	111	1.5
1922	1,455	18.0	1,395	17.2	844	10.4	349	4.3	191	2.4	84	1.0
1923	1,665	18.9	1,670	19.0	790	9.0	330	3.8	217	2.5	60	.7
1924	1,806	18.7	2,004	20.8	688	7.1	343	3.6	225	2.3	43	.5
1925	1,885	17.7	2,489	23.3	632	5.9	354	3.3	247	2.3	37	.4
1926	1,951	16.5	3,131	26.5	489	4.1	343	2.9	265	2.2	30	.3
1927	1,977	15.1	3,680	28.0	441	3.4	356	2.7	304	2.3	32	.3
1928	1,956	13.3	4,268	29.2	392	2.7	413	2.8	337	2.3	35	.2
1929	1,927	12.0	4,795	30.0	316	2.0	540	3.4	373	2.3	36	.2
1930	1,883	10.9	5,108	29.6	303	1.8	585	3.4	404	2.3	33	.2
1931	1,833	10.0	5,236	28.4	356	1.9	693	3.8	441	2.4	32	.2
1932	1,707	9.0	5,082	26.8	421	2.2	738	3.9	448	2.4	25	.1
1933	1,507	7.8	4,742	24.6	805	4.2	809	4.2	440	2.3	17	.1
1934	1,192	6.0	4,309	21.4	1,738	8.6	1,015	5.0	440	2.2	15	.1
1935	989	4.6	3,963	18.6	2,722	12.7	1,170	5.5	469	2.2	13	.1
1936	868	3.8	3,837	16.7	3,692	16.1	1,300	5.7	477	2.1	11	.1
1937	814	3.4	3,944	16.3	4,363	18.1	1,403	5.8	484	2.0	6	.0
1938	800	3.2	4,138	16.2	4,646	18.2	1,497	5.9	499	2.0	7	.0
1939	791	3.0	4,330	16.1	5,063	18.9	1,650	6.1	533	2.0	6	.0
1940	789	2.8	4,550	16.1	5,493	19.4	1,777	6.3	563	2.0	6	.0
1941	802	2.7	4,905	16.4	6,414	21.4	1,696	5.7	625	2.1	5	.0
1942	788	2.5	5,145	16.1	8,739	27.4	1,472	4.6	709	2.3	5	.0
1943	741	2.1	5,153	15.0	11,698	34.0	1,210	3.5	880	2.6	5	.0
1944	699	1.9	5,138	13.8	15,276	41.0	896	2.4	990	2.7	6	.0
1945	666	1.6	5,036	12.5	18,951	46.8	570	1.4	1,113	2.8	6	.0
1946	674	1.6	5,333	12.3	19,906	45.9	458	1.1	1,201	2.8	9	.0
1947 ‡	740	1.6	6,460	14.0	18,500	40.0	450	1.0	1,240	2.7	20	.1

* Source: *Proceedings* of the Thirty-eighth, Thirty-ninth, and Fortieth Annual Meetings of the Life Insurance Association of America, pages 20-22, December 1, 1944, December 14, 1945, May 7 and December 13, 1946, and "Life Insurance Record for 1947. A Report to the Membership of the Life Insurance Association of America," presented December 18, 1947, by Bruce E. Shepherd.

Life Insurance Companies—Selected Years *

Railroad stocks and bonds		Public utility stocks and bonds		Other bonds and stocks		Policy loans and premium notes		Real estate		Other assets		Total admitted assets
Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions	Percent	Millions
1,002	35.0	134	4.7	104	3.7	253	8.8	156	5.5	206	7.2	2,858
1,351	33.6	166	4.1	77	1.9	521	12.9	158	3.9	182	4.6	4,027
1,670	31.4	217	4.1	78	1.5	745	14.0	143	2.7	242	4.6	5,319
1,743	25.1	216	3.1	90	1.3	826	11.9	137	2.0	152	5.1	6,936
1,719	23.0	223	3.0	100	1.3	970	13.0	147	2.0	323	4.4	7,461
1,836	22.7	261	3.2	102	1.3	1,040	12.9	151	1.9	381	4.7	8,089
1,934	22.0	333	3.8	117	1.3	1,103	12.5	159	1.8	411	4.7	8,788
2,109	21.9	448	4.6	136	1.4	1,182	12.3	173	1.8	478	5.0	9,634
2,245	21.0	619	5.8	160	1.5	1,287	12.1	187	1.8	526	4.9	10,668
2,413	20.4	814	6.9	170	1.4	1,419	12.0	213	1.8	590	4.9	11,829
2,561	19.5	1,076	8.2	213	1.6	1,581	12.0	248	1.9	662	5.0	13,132
2,738	18.7	1,325	9.1	312	2.1	1,780	12.2	295	2.0	780	5.4	14,632
2,848	17.8	1,450	9.1	412	2.6	2,128	13.3	339	2.1	836	5.2	16,002
2,947	17.1	1,675	9.7	543	3.1	2,503	14.5	405	2.4	857	5.0	17,247
2,995	16.3	1,813	9.8	593	3.2	3,002	16.3	514	2.8	900	4.9	18,411
2,940	15.5	1,807	9.5	591	3.1	3,409	17.9	748	3.9	1,073	5.7	18,989
2,889	15.0	1,828	9.5	581	3.0	3,422	17.8	1,104	5.7	1,116	5.5	19,259
2,913	14.5	1,927	9.6	660	3.3	3,302	16.4	1,489	7.4	1,111	6.0	20,110
2,876	13.4	2,171	10.1	789	3.7	3,189	14.9	1,752	8.2	1,283	5.8	21,385
2,933	12.8	2,563	11.2	922	4.0	3,058	13.4	1,892	8.3	1,347	5.8	22,900
3,030	12.6	2,823	11.7	1,219	5.0	3,044	12.6	1,931	8.0	1,080	4.7	24,142
2,969	11.6	3,277	12.9	1,500	5.9	3,039	11.9	1,928	7.5	1,193	4.7	25,495
2,946	11.0	3,774	14.1	1,565	5.8	2,899	10.8	1,897	7.1	1,392	5.4	26,847
2,993	10.6	4,197	14.9	1,772	6.3	2,748	9.7	1,827	6.5	1,535	5.4	28,249
2,987	10.0	4,774	15.9	2,069	6.9	2,582	8.6	1,644	5.5	1,433	4.2	29,937
2,781	8.7	5,043	15.8	2,059	6.5	2,364	7.4	1,449	4.5	1,329	4.5	31,884
2,750	8.0	5,060	14.7	2,115	6.2	2,086	6.1	1,171	3.4	1,513	4.4	34,383
2,694	7.2	5,099	13.7	2,138	5.7	1,872	5.0	923	2.5	1,535	4.1	37,265
2,821	7.0	4,948	12.2	2,244	5.6	1,716	4.2	729	1.8	1,656	4.1	40,455
2,765	6.4	5,373	12.4	3,776	8.7	1,651	3.8	657	1.5	1,526	3.5	43,329
2,815	6.1	6,750	14.6	5,225	11.3	1,695	3.7	750	1.6	1,555	3.3	46,200

† Percentage of .0 is used to designate less than 0.1 of 1 percent.
‡ 1947 figures preliminary.

Appendix N

The Holding Company

EXTRACT FROM TESTIMONY OF ROBERT E. HEALY BEFORE COMMITTEE ON BANKING AND CURRENCY, U. S. SENATE, 73D CONGRESS, 1ST SESSION, ON S.875 *

Mr. Healy (at the time Chief Counsel, Federal Trade Commission) is discussing the chart on pages 642 and 643.†

MR. HEALY: Now, I should be glad if you would look for just a minute at this little chart that I have brought up here. It shows how complicated these things can be sometimes. This is a segment of the Insull pyramid. Down here at the bottom you will notice that pretty nearly every one of these operating companies has debentures or bonds outstanding and preferred and common stock as well. The companies are Florida Power Corporation and Georgia Power & Light Co. and several others. We give them under the name of each company. But the common stock of all these companies is owned by the next company in the step-up, which is the next step-up of the pyramid, in this case the Seaboard Public Service Co. And that company has preferred stock and debentures outstanding, and its common stock is owned by the corporation shown as the next step-up in the pyramid, the National Public Service Corporation.

Now the National Public Service Corporation, in addition to owning the common stock of the Seaboard Public Service Co., owns some other Insull holding companies. National Public Service Corporation has outstanding bonds or debentures, preferred and common stock, and its common stock is owned by National Electric Power Co., so we come to the National Electric Power Co., and the common stock of that company, which has also debentures and preferred stock in the hands of the public, is owned by the next corporation shown in the pyramid, the Middle West Utilities Co.

* Hearings, March 31 to April 8, 1933, pp. 222-24.

† In National Public Service Corp. total, read $55,733,047; Florida West Coast Ice Co., $2,951,500.

The Middle West Utilities Co. also owns other shares, aside from those of the National Electric Power Co., of course. The Middle West Utilities Co. has preferred stock and bonds out. And the Insull top companies shown here own common stock of the Middle West Utilities Co. And they have put out to the public a large volume of securities, securities which you gentlemen have heard about in some of your hearings.

THE CHAIRMAN: What about the Insull family?

MR. HEALY: They own something in these two companies, Corporation Securities Co. of Chicago and Insull Utilities Investments, Inc., beside what the public own. At each succeeding step of this pyramid you find preferred stock and bonds out in the hands of the public. So here is the situation that is shown: The two corporations I am now pointing to, Corporation Securities Co. of Chicago and Insull Utilities Investments, Inc., own common stock in the Middle West Utilities Co. Then the Middle West Utilities Co. has common stock in the National Electric Power Co.; the National Electric Power Co. has common stock in the National Public Service Corporation; the National Public Service Corporation has common stock in the Seaboard Public Service Co.; and the Seaboard Public Service Co. has common stock in the Florida Power Co., Eastern Shore Public Service Co., Georgia Power & Light Co., Virginia Public Service Co., Florida West Coast Ice Co., and Tidewater Power Co.

The only real earnings of this outfit are in the bottom operating companies and they are diluted and subdivided as you go up the pyramid. In other words, the structure is top-heavy and falls down. It is also noteworthy that by this process the amount of the investment that the top company actually needs to make to get control of the companies at the bottom is constantly divided and subdivided all the way down.

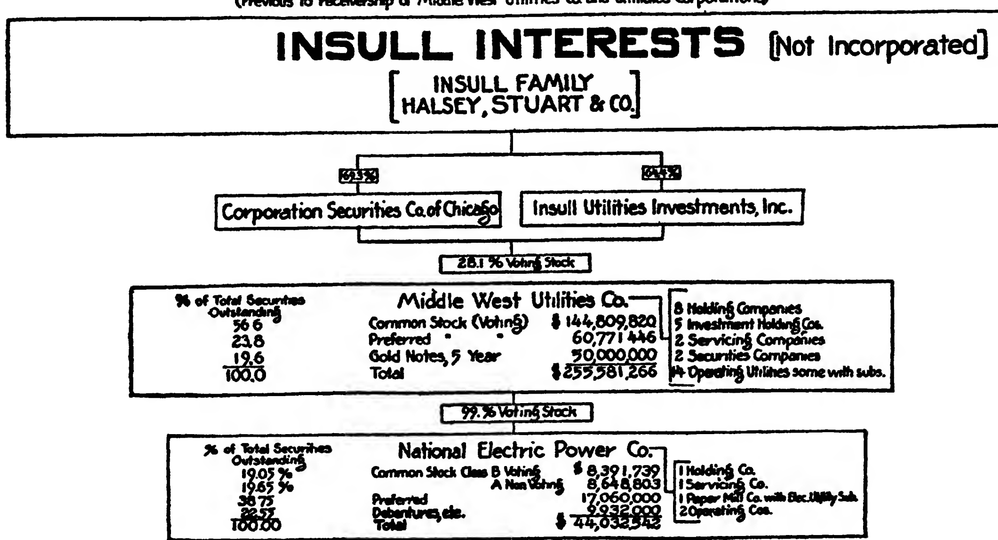
You will see that the man who owns the majority or a control of the Seaboard Public Service Co. will control these operating companies shown at the bottom of the chart.

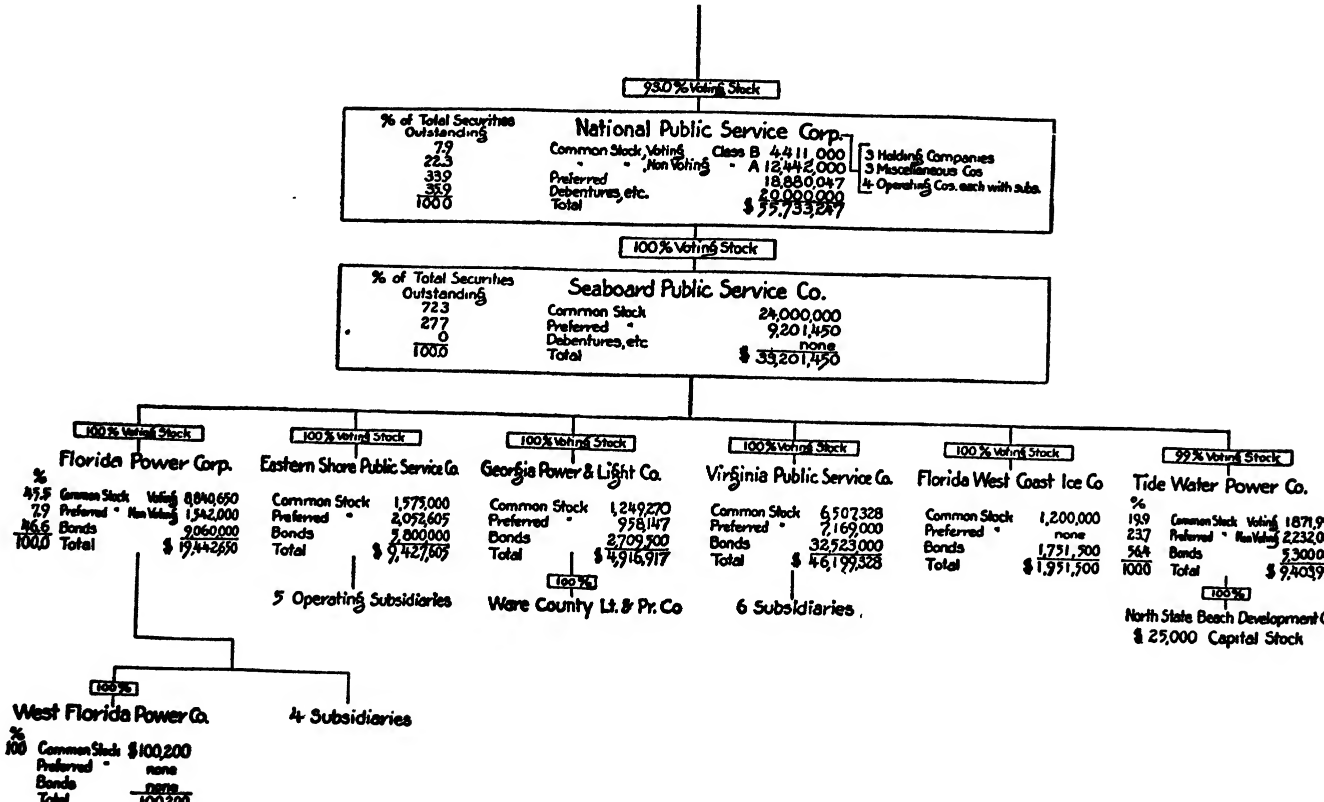
Now, you can split their common stock in half and own it and you have control of the Seaboard Public Service Co. You can do the same thing in each successive step all the way up the pyramid until the actual investment by which the top company owns the bottom company is small, and all the way up the public has been putting money into preferred stocks and bonds and debentures, whereas the only earning power and ownership are down here at the bottom of the pyramid.

CHART OF CHAIN OF CONTROL BY INSULL INTERESTS (not Incorporated)

through one system of pyramided holding companies within the Middle West Utilities Company System to actual property-owning, operating utilities in Florida and North Carolina as of Dec. 31, 1930.

(Previous to receivership of Middle West Utilities Co. and affiliated Corporations)




93.0 % Voting Stock
% of Total Securities Outstanding
7.9
22.3
33.9
35.9
100.0
National Public Service Corp.
Common Stock, Voting Class B 4,411,000
" " , Non Voting " A 12,442,000
Preferred 18,880,047
Debentures, etc. 20,000,000
Total $ 55,733,247
3 Holding Companies
3 Miscellaneous Cos
4 Operating Cos. each with subs.
100 % Voting Stock
% of Total Securities Outstanding
72.3
27.7
0
100.0
Seaboard Public Service Co.
Common Stock 24,000,000
Preferred " 9,201,450
Debentures, etc none
Total $ 33,201,450
100 % Voting Stock
Florida Power Corp.
%
45.5 Common Stock Voting 8,840,650
7.9 Preferred " Non Voting 1,542,000
46.6 Bonds 9,060,000
100.0 Total $ 19,442,650
100 % Voting Stock
Eastern Shore Public Service Co.
Common Stock 1,575,000
Preferred " 2,052,605
Bonds 5,800,000
Total $ 9,427,605
5 Operating Subsidiaries
100 % Voting Stock
Georgia Power & Light Co.
Common Stock 1,249,270
Preferred " 958,147
Bonds 2,709,500
Total $ 4,916,917
100 %
Ware County Lt. & Pr. Co
100 % Voting Stock
Virginia Public Service Co.
Common Stock 6,507,328
Preferred " 7,169,000
Bonds 32,523,000
Total $ 46,199,328
6 Subsidiaries
100 % Voting Stock
Florida West Coast Ice Co
Common Stock 1,200,000
Preferred " none
Bonds 1,751,500
Total $ 1,951,500
99 % Voting Stock
Tide Water Power Co.
%
19.9 Common Stock Voting 1,871,997
23.7 Preferred " Non Voting 2,232,000
56.4 Bonds 5,300,000
100.0 Total $ 9,403,997
100 %
North State Beach Development Co.
$ 25,000 Capital Stock
100 %
West Florida Power Co.
%
100 Common Stock $100,200
Preferred " none
Bonds none
Total 100,200
4 Subsidiaries

The Chairman: And it finally focuses at the top in what?

Mr. Healy: In control by Corporation Securities Co. of Chicago and the Insull Utilities Investments, Inc., which, according to our information were in the control of the Insull family and Halsey, Stuart & Co. And you gentlemen of the committee already know what a mass of securities those companies have put out, particularly the two top companies.

Now, I might say that we have spent a lot of time on all these companies, and we have reports on all of them. Some of them were in the record some months, before you had young Mr. Insull and Mr. Stuart here before you. But the National Electric Power Co. is in bankruptcy. The National Public Service Corporation is in bankruptcy. The Middle West Utilities Co. and the Corporation Securities Co. of Chicago and the Insull Utilities Investments, Inc., are in receivership. The Seaboard Public Service Co. is also in bankruptcy, although according to our examination it had earnings every year and never defaulted on a single obligation, going to prove, as Owen D. Young suggested, that perhaps if you have one holding company it might be enough. But here is a company that is solvent and making money apparently, the Seaboard Public Service Co., and that is in bankruptcy on account of the involved condition of the affairs of its affiliated companies, which is a pretty bad thing for the holders of the preferred stock and debentures of the Seaboard Public Service Co., although I have no doubt they will get their money.

Senator Wagner: The Seaboard Public Service Co. is a holding company?

Mr. Healy: Yes, sir.

The Chairman: The rates and charges and earnings of the whole structure depend upon the operating companies shown at the bottom of the chart?

Mr. Healy: Yes, sir. They are the real earning power of the group, and have the real property as well.

The Chairman: All right.

Mr. Healy: Now, there are various companies that come into this picture which we have left out of this chart, engineering and servicing companies. If you go up this pyramid above the Seaboard Public Service Co., each of the succeeding companies has more holdings in other companies than appear in this chart. And that is one reason why the situation got so complicated that I believe no human being could possibly appraise the effect of all the Insull enterprises on the top company.

SENATOR WAGNER: Of course, it is desirable to prevent such a condition from recurring.

MR. HEALY: Yes, sir.

EQUITY IN THE OPERATING COMPANY AT THE BOTTOM OF THE PYRAMID OWNED BY THE SUCCESSIVE HOLDING COMPANY ABOVE IT BASED ON BOOK VALUES OF THE SECURITIES OF THE SPECIFIED COMPANIES AS OF DECEMBER 31, 1930 *

Company or interest	Percentage of total securities of specified company constituted by its voting stock	Percentage of voting stock of specified company owned by the company next above it	Percentage of total securities of specified company owned by the company next above it	Percentage of total securities of operating company at the bottom of the pyramid owned by specified company †
Insull Interests ‡ ...	.	..	. .	0.05
Corporation Securities Co of Chicago and Insull Utility Investments, Inc . .	69.7	66.0 §	46.0	.10
Middle West Utilities Co	80.4	28.1	22.6	.45
National Electric Power Co	19.1	99 0	18.9	2.40
National Public Service Corporation .	7.9	93.0	7.3	32.90
Seaboard Public Service Co	72.3	100.0	72.3	45.5
Florida Power Corporation	45 5	100 0	45.5	100.00
West Florida Power Co.	100.0	100.0	100 0	

* Source: Utility Corporation 72A, p. 160.

† Product of figures in columns 3 and 4 carried to the company next above The figures in this column represent the equity in the bottom company owned at each level

‡ Insull family: Insull companies, their officers and directors, and Halsey Stuart & Co

§ Insull interests as of November 21, 1931, owned 62 0 percent and 69 3 percent, respectively, of the total number of shares of voting stock of Utility Investments, Inc , and Corporation Securities Company of Chicago The percentage given in table (66.0) was computed from combined totals for the two companies.

THE PROCEEDINGS IN REGARD TO THE LONE STAR SYSTEM UNDER SECTION 11 OF THE PUBLIC UTILITY HOLDING COMPANY ACT OF 1935 *

The Lone Star Corporation and various of its subsidiaries were the first holding company system fully to comply with the law in regard to integration and simplification.

* These facts are taken from the findings and opinions of the Securities and Exchange Commission *Decisions and Reports,* Vol. 12, in cases beginning at pages 286, 424, and 593, and the Securities and Exchange Commission *Survey of American Listed Corporations—Registrants and Subsidiaries,* 1942. The findings and opinions of the Securities and Exchange Commission on the plan are also found in Securities and Exchange Commission *Holding Company Release No.* 3865.

CHART OF THE LONE STAR SYSTEM BEFORE THE PLAN WAS PUT INTO EFFECT

Present Common Stockholders of the Lone Star Gas Corporation

100%

Lone Star Gas Corporation (Del.)
A registered holding company

Capitalization	Amount	%
Bank loan notes 2-2.25% due 1942-1951	$22,550,000	26.7
Common stock, no par, 5,502,575 shares outstanding	58,460,404	69.1
Capital surplus	33,693	.
Earned surplus	3,520,141	4.2
Total	$84,564,238	100.0

100%

Community Natural Gas Co. (Del.)
A utility company

Capitalization	Amount	%
Notes 4.5% due parent	$ 5,800,000	45.4
Common stock, $100 par	6,000,000	47.0
Earned surplus	966,035	7 6
Total	$12,766,035	100.0

99.9%

Lone Star Gas Company (Texas)
A utility company

Capitalization	Amount	%
Notes 4 5% due parent	$11,400,000	23.3
Common stock, no par	17,917,108	36.6
Capital surplus	4,000,000	8.2
Earned surplus	15,610,428	31.9
Total	$48,927,536	100.0

100%

Texas Cities Gas Company (Texas)
A utility company

Capitalization	Amount	%
Notes 4.5% due parent	$3,125,000	34.5
Common stock, $100 par	6,000,000	66 3
Earned surplus (deficit)	(70,321)	(0.8)
Total	$9,054,679	100.0

100%

The Dallas Gas Company (Texas)
A utility company

Capitalization	Amount	%
Notes 4.5% due parent	$4,975,000	58.1
Common stock, $100 par	2,550,000	29.8
Earned surplus	1,039,424	12.1
Total	$8,564,424	100.0

100%

Council Bluffs Gas Co. (Del.)
A utility company

Capitalization	Amount	%
Notes 4.5% due parent	$1,100,000	48.5
Common stock, $100 par	1,350,000	59.5
Earned surplus (deficit)	(180,108)	(8.0)
Total	$2,269,892	100.0

100%

Lone Star Gasoline Co. (Del.)
A nonutility company

Capitalization	Amount	%
Notes 4.5% due parent	$2,100,000	40.3
Common stock, $100 par	3,100,000	59.4
Earned surplus	15,125	0.3
Total	$5,215,125	100.0

30%

Northern Natural Gas Company
A registered holding company and nonutility operating company

100%

Peoples Natural Gas Company. Argus Natural Gas Company
Utility operating companies

The Lone Star Gas Corporation, which was solely a holding corporation, owned all or practically all of the stock of six subsidiaries, and 30 percent of the stock of another, in addition to other holdings which were not involved in the proceedings. Five of the subsidiary operating companies were engaged in the production, distribution, and sale of natural gas and related products in Texas and southern Oklahoma. Most of these companies were engaged in business in a fairly compact system geographically. Two of them, the Council Bluffs Gas Company and the Northern Natural Gas Company, operated in Iowa, South Dakota, Minnesota, and Nebraska, rather far distant from the main system of the company. One of these subsidiaries, the Texas Cities Gas Company, also operated in the neighborhood of El Paso, Galveston, and other points in south and southwest Texas, even extending its operations into Juárez, Mexico.

The Lone Star Corporation had also controlled the Northwest Cities Gas Company, an artificial gas utility operating in Oregon, Washington, and Idaho, but this subsidiary had gone through a reorganization in which the only securities given any participation were the first-mortgage bonds. Since the Lone Star Corporation held none of these bonds, its control over this subsidiary was cut off by this reorganization. The status of this company, therefore, did not concern the Securities and Exchange Commission under the Public Utility Holding Company Act.

The relation among the various companies is shown by the chart. The state of incorporation, the capitalization, and the amount of stock ownership by the holding company are given in the appropriate places.

Under Section 11 of the Public Utility Holding Company Act of 1935 it is the duty of the Securities and Exchange Commission to limit operations of a utility holding company to a "single integrated public utility system" and other business reasonably incidental. By a single integrated system is meant a system "so located and related that substantial economies may be effectuated by its being operated as a single coordinated system confined in its operations to a single area or region."

The Securities and Exchange Commission, in considering a plan of integration submitted by the company voluntarily under the Act, found that the companies operating in the northern part of Texas and the southern part of Oklahoma were compact and were operating as a well-coordinated system. The Commission found, for instance,

that in this central area no Lone Star distribution system was located more than 47 miles from another. The average distance between cities and towns served by the central system was less than 10 miles.

The Commission found, on the other hand, that the operations in and around El Paso and Galveston were connected with the central system merely through management and control and not through any real physical coordination of facilities.

The following plan of integration was finally worked out and was approved in 1942 by the Securities and Exchange Commission. It was put into effect almost immediately.

1. The common stock of Northern Natural Gas Company, which operated directly and through subsidiaries in Iowa and neighboring states, was to be distributed to the stockholders of Lone Star Gas Corporation as a dividend in the ratio of 1 share of Northern to each 18 shares of Lone Star. Certain provisions were made for the sale of fractional shares. This action was intended to eliminate completely the Northern Natural Gas Company as a member of the system.

2. The Lone Star Corporation was to sell the assets and securities in Council Bluffs Gas Company at a price estimated at some $1,350,000. The proceeds from this sale were to be used to retire some of the bank loans of the Lone Star Gas Corporation. This was made to a private individual, and in the course of the proceedings the Commission also saw to it that the purchaser agreed to squeeze some water out of the Council Bluffs Company through a decapitalization of its common stock.

3. The assets and business of the Texas Cities Gas Company which were located in and around El Paso and Galveston were to be sold. The proceeds from this sale were to be used to reduce bank loans and to acquire other reasonably located natural gas and production and transmission properties.

The provisions in the steps just given accomplished the geographical integration required by the Holding Company Act. The Securities and Exchange Commission also recommended some further points of corporate simplification. These are now described.

4. The remaining subsidiaries, that is Lone Star Gas, Community Gas, Dallas Gas, Lone Star Gasoline, and Texas Cities Gas (only part of this was to be disposed of in the integration just described). were to convey all their properties to the Lone Star Gas Corporation, in return for which the Lone Star Gas Corporation was to cancel all

the securities it owned in such companies and was to assume all their liabilities. These subsidiaries were then to be dissolved.*

5. A new Texas corporation, to be known as the Lone Star Gas Company, was to be organized. The Lone Star Gas Corporation was to transfer to this new company all the assets held by it. The new company was to assume all the liabilities of the Lone Star Gas Corporation. For this transfer the Lone Star Gas Company would issue to the Lone Star Gas Corporation its own stock of $10 per share in amounts equal to the net book value of the assets it would acquire less the liabilities it would assume. The Lone Star Gas Corporation was then dissolved, its stockholders receiving in exchange for their old stock the newly issued stock of the Lone Star Gas Company of Texas.

6. The Lone Star Gas Company was then to transfer a portion of its producing assets, as distinguished from its utility or transmission assets, which it had acquired in step 5, to a second new company called the Lone Star Producing Company. The Lone Star Gas Company thus was to be a utility company and the Lone Star Producing Company was to be a nonutility company. In return for these assets the Lone Star Producing Company was to assume certain liabilities of the old Lone Star Gasoline Company and issue 85,000 shares of its common stock to the Lone Star Gas Company. Any difference in the values, estimated to be about $1,000,000, was to be paid by the Lone Star Company to the Lone Star Producing Company in cash for the purpose of adding to its working capital.

All these provisions of the plan have been carried out, and as a result, the scheme of the new organization is outlined as follows:

The old stockholders of the Lone Star Gas Corporation

became the

stockholders of the new Lone Star Gas Company (Texas), an operating and holding company (parent company)

which owns 100 percent of the stock of

Lone Star Producing Company (Texas), an operating company.

The old stockholders of the Lone Star Gas Corporation also became the holders of the old 30-percent interest held by their corpora-

* It will be noticed from the diagram that the Lone Star Gas Corporation did not hold quite all the stock of the Lone Star Gas Company. The minority holders were bought off at $150 per share.

tion in the common stock of Northern Natural Gas Company. The Northern Natural Gas Company, in turn, controls the Peoples Natural Gas Company and Argus Natural Gas Company, Inc.

THE LONE STAR SYSTEM AFTER REORGANIZATION

(*pro forma*)*

1. Lone Star Gas Corporation to distribute the Northern Natural Gas Company stock to its stockholders as a dividend.
2. Lone Star Gas Corporation to sell all of its interest in Council Bluffs Gas Company for an estimated $1,450,000 and will apply the proceeds to the reduction of the Bank Loan Notes.
3. Lone Star Gas Corporation and its remaining subsidiaries to be combined into two new Texas companies.

PRESENT COMMON STOCKHOLDERS OF LONE STAR GAS CORPORATION

100%

LONE STAR GAS COMPANY (TEXAS)
A utility operating company

Capitalization	Amount	%
Bank loan notes 2-2.25% due 1942-1951 †	$21,100,000	27 7
Common stock, $10 par, 5,499,000 shares outstanding	54,990,000	72 3
Total	$76,090,000	100 0

100%

LONE STAR PRODUCING COMPANY (TEXAS)
A nonutility company

Capitalization	Amount	%
Common stock, $100 par, 85,000 shares outstanding	$8,500,000	100 0

30%

NORTHERN NATURAL GAS COMPANY
A registered holding company and nonutility operating company

100%

PEOPLES NATURAL GAS COMPANY
ARGUS NATURAL GAS COMPANY, INC.
Utility operating companies

* Does not give effect to the disposal of the El Paso and Galveston properties.
† Excluding $2,300,000 due in 1942.

Appendix O

Taylor *et al.* *v.* Standard Gas and Electric Company *et al.* (1939), 306 U. S. 307

This case is an illustration of ignoring corporate entity. We will include here a summary of the facts as they pertained to this issue and will make several quotations from the opinion of the court to show the nature of the reasoning.

Deep Rock Oil Corporation, a subsidiary of Standard Gas and Electric Company, went into the hands of a receiver in 1933, and proceedings were instituted under Section 77B of the Bankruptcy Act. Deep Rock had outstanding three main types of obligations and securities: common stock, held mainly by Standard; preferred stock, held by various individuals, including Taylor, the plaintiff in this case; and notes and short-term debts and book accounts, owed largely to Standard. Many of the short-term debts and book accounts owed to Standard arose through Standard's taking advantage of its position as dominant stockholder. Standard lent money to Deep Rock to permit it to pay dividends on its preferred stock so as to keep Standard in undisturbed control of Deep Rock and to prevent the preferred holders from getting a contingent voice and vote in the management. Loans and advances of funds, mainly through credits in the open accounts, were made by Standard to Deep Rock as a "payment" for services rendered by Standard's wholly owned subsidiary, the Byllesby Management Corporation. Dividends were paid on the Deep Rock common stock largely through money borrowed from Standard. Numerous other abuses are cited in the record.

In the drawing up of a reorganization plan under Section 77B (most of the provisions of which were later carried over into Chapter X of the Chandler Act) attention must be given to the absolute priority rule. Strictly applied, this would mean in our case that the notes and debts owed by Deep Rock should come first, then the preferred stock, and finally the common stock. This order of priority

was proposed in some phases of the plan, but Taylor, the plaintiff, representing a preferred stockholders' protective committee, protested. He argued that Standard Gas and Electric was essentially both proprietor and creditor of Deep Rock and that, therefore, the preferred stock should be given a position prior to that of the notes and accounts held by Standard. Technically, the plaintiff may be said to have "invoked the instrumentality rule."

The Supreme Court of the United States, reversing the lower courts, upheld the contention of Mr. Taylor and his committee. The Supreme Court, in essence, decided that for all practical purposes the Standard Gas and Electric Corporation and the Deep Rock Oil Corporation were one and the same thing in reference to the facts and issues of this case.

A few extracts are here given from the opinion written for the Court by Mr. Justice Roberts.

Thenceforward the debtor was under the complete control and domination of Standard through ownership of the common stock. Standard's officers, directors, and agents always constituted a majority of the Board. The remaining directors were operating officers or employees of Deep Rock who had been employed on behalf of Deep Rock by Standard or the Byllesby Management Corporation, hereinafter called Management Corporation, a wholly owned subsidiary of Standard, or were under the complete control of Standard. A majority of Deep Rock's officers were officers or directors of Standard or of the Management Corporation, or of both. The officers of the debtor [Deep Rock] . . . reported to and were always subject to the direction of officers and directors of Standard. All of the fiscal affairs of the debtor were wholly controlled by Standard, which was its banker and its only source of financial aid. (pp. 310-11)

Upon recommendation of the operating officials, Standard decided that Deep Rock should purchase the so-called Bradstreet properties. . . . (p. 317)

In 1922 Standard had caused a company to be formed in Delaware known as Deep Rock Oil and Refining Company, intending that it should take title to the Bradstreet properties and the cracking plant. The purpose, as Standard's officers now state, was to keep these assets from going into direct ownership of Deep Rock and thus coming under the lien of its mortgage, so that they could be used as the basis of additional financing. (p. 318)

Deep Rock finds itself bankrupt not only because of the enormous sums it owes Standard but because of the abuses in management due to the paramount interest of interlocking officers and directors in the

preservation of Standard's position, as at once proprietor and creditor of Deep Rock. It is impossible to recast Deep Rock's history and experience so as even to approximate what would be its financial position at this day had it been adequately capitalized and independently managed and had its fiscal affairs been conducted with an eye single to its own interests. (p. 323)

If a reorganization is effected the amount at which Standard's claim is allowed is not important if it is to be represented by stock in the new company, provided the stock to be awarded it is subordinated to that awarded preferred stockholders. No plan ought to be approved which does not accord the preferred stockholders a right of participation in the equity in the company's assets prior to that of Standard, and at least equal voice with Standard in the management. Anything less would be to remand them to precisely the status which has inflicted serious detriment on them in the past. (p. 324)

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